

ACIDIC PRECIPITATION IN ONTARIO STUDY

DAILY PRECIPITATION CHEMISTRY LISTINGS

1988

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Environment Environnement

Jim Bradley, Minister/ministre

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1988

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Air Resources Branch
Ontario Ministry of the Environment

Report prepared by:
A.P.I.O.S. Coordination Office
Ontario Ministry of the Environment

MAY 1990



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PART I

INTRODUCTION

INTRODUCTION

The data listed herein are a summary of the 1988 results acquired from the APIOS daily precipitation sampling network. All data presented in this report have been screened for validity. Remarks and qualifications have been appended to records, and/or results where necessary. The screening procedure involved checking each record for chemical analysis integrity (e.g., ionic balance, observed vs. theoretical conductance). Gross limit checks were applied to the results. Upper limits were determined as $M + 2S$ where median (M) and scale (S) represent robust estimates of the mean and standard deviation respectively. Scale of the distribution was determined from interquartile distance, i.e. $S = 0.74$ (3rd quartile - 1st quartile) based upon logarithmically transformed results. In a situation where the distribution is significantly bounded by reported detection limits, S may be estimated as follows, $S = 1.48$ (3rd quartile - 2nd quartile). Lower gross limits were specified by the above method except for those parameters with minimum values at or near the detection limit (Mg, K and Na). For these parameters a lower gross limit of zero was utilized. The data were also screened for outliers statistically by applying the Dixon Ratio test to the highest and lowest values observed in each region on a daily basis. Outliers were determined at the 95% level of confidence. Records and/or results deemed unreliable were flagged not deleted. Detailed description of the validation procedures as applied to this data set is available from the Ministry upon request.

Station Identification

The station identification is defined by four descriptive fields (e.g. Dorset/Daily/Aerochem #8). The first field refers to the sampling location. The second and third fields describe the sampling interval and the instrumentation used respectively. The last numeric field refers to the index code utilized on the location map.

Daily Precipitation Chemistry Listings

Sample type, as coded in the data listings, represents the best guess of the type of event which was sampled. All chemical analyses were done on unfiltered sampler. Lab pH entries represent pH measurements at the main MOE Laboratory in Toronto while field pH entries represent measurements at regional laboratories. Remarks codes (e.g., U,A) appended to individual results are defined in a later section. The tabulated results for "Free H" were calculated from the reported Lab pH. Total hydrogen results, reported as "Total H", represent either a gram analysis titration or a titration of the sample with NaOH to an end point pH of 8.3.

Calculation of Equivalent Precipitation Depth (mm)

$$\text{Equivalent Precipitation Depth (mm)} = \frac{\text{Volume Collection (ml)} \times 15.6}{1000}$$

Calculation of Observed Sampling Efficiency

$$\% \text{ Efficiency} = \frac{\text{Equivalent Precipitation Depth (mm)} \times 100\%}{\text{Gauge Depth (mm)}}$$

If the sample collection efficiency is less than 50% or greater than 120% and if the field comment codes which affect sample collection efficiency (i.e. "F", "G", "H", "I", "J", "K", "L", "P" and "M") is appended to the sample record, then the sample collection efficiency is flagged as unreliable.

Field Comment Code Index

A - Insect in sample	I - Event(s) missed
B - Leaves in sample	J - Wet side open when not precipitating
C - Particulates in sample	K - No precipitation collection
D - Fibres in sample	L - Part of event missed
E - Sample not submitted	M - Dry side open when precipitating
F - Sampler malfunctioned	P - Gauge depth incorrect
G - Sample spilled or leaked	Q - Other
H - Volume incorrect	

Office Comment Code Index

C - Poor calculation vs. observed conductance comparison	Y - Collection sample remained in excess of 24 hours with event(s) only occurring in the first 24 hours
J - pH Large	Y2 - Sampling period equal to two days
H - Poor calculated vs. observed pH comparison	Y3 - Sampling period equal to three days
M - Poor ionic balance	Y4 - Sampling period equal to four days
N - Abnormal sample collection	Z - Non-standard collection period with one or more events collected after 24 hours
T - Free H ⁺ exceeds total H ⁺	

Results Remark Code Index

>	- actual results greater than value reported
<	- actual result less than value reported
<T	- actual result less than criterion of detection
<W	- no response, minimum possible results reported
A	- approximate value
U	- unreliable result
LG	- exceedance of Lower Gross Limit Checks
UG	- exceedance of Upper Gross Limit Checks
D	- outlier of Dioxin Ratio Test
B	- exceedance of Gross Limit Checks and Outlier of Dioxin Ratio Tests

PART II

STATION DESCRIPTION AND LOCATION MAP

ONTARIO MINISTRY OF THE ENVIRONMENT
APIOS-ACIDIC PRECIPITATION IN ONTARIO STUDY
DAILY PRECIPITATION SITES

STATION ID	MOE REGION	STATION NAME	ELEV (M)	LATITUDE (NORTH)	LONGITUDE (WEST)	UTM GRID CO-ORDINATES (NORTHING) (EASTING)	
000002-02-01-1011	SOUTHWESTERN	LONGWOODS	239	42°53'03"	81°28'50"	4747849	460756
000002-02-01-1021	SOUTHWESTERN	MELBOURNE	213	42°47'12"	81°33'27"	4737061	454401
000002-02-01-1031	SOUTHWESTERN	NORTH EASTHOPE	375	43°24'22"	80°53'45"	4805705	508434
000002-02-01-2011	SOUTHWESTERN	WELLESLEY	344	43°28'05"	80°45'33"	4812606	519481
000002-02-01-2031	SOUTHWESTERN	EGBERT	253	44°13'57"	79°46'53"	4898202	597322
000002-02-01-3011	CENTRAL	DORSET	320	45°13'25"	78°55'51"	5009657	662451
000002-02-01-3021	CENTRAL	NITHGROVE	325	45°12'03"	78°04'12"	5009221	730127
000002-02-01-3031	CENTRAL	BALSAM LAKE	259	44°37'45"	78°51'22"	4943776	670063
000002-02-01-3041	CENTRAL	RAVEN LAKE	274	44°36'40"	78°54'43"	4941655	665686
000002-02-01-4011	SOUTHEASTERN	CHARLESTON LAKE	92	44°29'50"	76°02'40"	4927414	416963
000002-02-01-4021	SOUTHEASTERN	RAILTON	152	44°22'34"	74°34'45"	4913518	533527
000002-02-01-4031	SOUTHEASTERN	GRAHAM LAKE	130	44°34'50"	76°51'45"	4940930	749090
000002-02-01-4081	SOUTHEASTERN	GOLDEN LAKE	160	45°36'48"	77°12'03"	5053226	328397
000002-02-01-4101	SOUTHEASTERN	WILMER	125	44°26'23"	76°31'50"	4921637	378195
000002-02-01-5061	NORTHEASTERN	GOWGANDA ✓	343	47°39'04"	80°46'32"	5277329	516647
000002-02-01-5171	NORTHEASTERN	HIGH FALLS	215	46°22'55"	81°32'43"	5136412	458068
000002-02-01-6051	NORTHWESTERN	FERNBERG	506	47°56'51"	91°29'26"	5311349	612714
000002-02-01-6071	NORTHWESTERN	QUETICO CENTRE	420	48°24'44"	91°12'08"	5363461	633036
000002-02-01-6131	NORTHWESTERN	DAWSON	381	48°33'38"	89°38'60"	5381779	304475
000002-02-01-7011	QUEBEC	SUTTON	243	45°04'35"	72°40'35"	4993846	682898
000002-02-01-7021	PENNSYLVANIA	PENN. STATE ✓	120	40°47'18"	77°56'47"	4519229	251390

LEGEND

1. Melbourne
2. Longwoods
3. N. Easthope
4. Wellesley
5. Raven Lake
6. Balsam Lake
7. Nithgrove
8. Dorset
9. Whitman Creek
- 9A. Wilmer
10. Railton
11. Charleston Lake
12. Graham Lake
13. Forbes Township
14. Quetico Centre
15. Lac La Croix
16. Fernberg
17. Dawson
18. Gowganda
19. High Falls
20. Egbert
21. Penn State (Pa)

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Ontario

PART III

CENTRAL REGION

DAILY PRECIPITATION CHEMISTRY LISTINGS

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : BALSAM LAKE/DAILY/AEROCHEM

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REMOVAL DATE	EXPOSURE DATE	SAMPLING START/END HR. HR.	PRECIP START/END HR. HR.	SAMPLE TYPE 01-RAIN 02-SNOW 03-COMP/04-OTHER	GAUGE DEPTH(MM)	GAUGE TYPE 01-STD. 02-NIPHER	SAMPLE NUMBER	PROJECT CODE 02-APIOS 03-SPECIAL	SUBPROJECT CODE 01-MOE 03-AES	SAMPLER EFFICI- ENCY (%)	COMMENTS FIELD OFFICE
JAN 4,88	JAN 3,88	755 755	400 700	2	1.2	2	76212	2	1	198	N
JAN 5,88	JAN 4,88	755 750	1000 750	2	9.1	2	76213	2	1	68	JHM
JAN 6,88	JAN 5,88	750 750	750 1400	2	2.3	2	76214	2	1	10	N
JAN 9,88	JAN 8,88	800 950	2300 600	2	1.1	2	76215	2	1	39	N
JAN 12,88	JAN 11,88	800 755	1100 1500	2	1.3	2	76216	2	1	126	NH
JAN 15,88	JAN 14,88	800 755	400 700	2	1.3	2	76217	2	1	92	
JAN 18,88	JAN 17,88	800 755	900 700	1	12.1	2	76218	2	1	24	N
JAN 19,88	JAN 18,88	755 755	1000 1500	1	0.2	2	76219	2	1	639	N
JAN 20,88	JAN 19,88	755 750	100 700	3	5.0	2	76220	2	1	93	
JAN 21,88	JAN 20,88	750 755	200 600	2	0.3	2	76221	2	1	369	N
JAN 24,88	JAN 23,88	800 1430	930 1400	2	5.1	2	76222	2	1	76	
JAN 25,88	JAN 24,88	1430 755	1700 700	2	0.2	2	76223	2	1	93	
JAN 29,88	JAN 28,88	755 755	900 1400	2	0.1	2	76224	2	1	296	N
JAN 31,88	JAN 30,88	800 1500	100 1400	1	5.1	2	76225	2	1	141	N
FEB 1,88	JAN 31,88	1500 755	1700 600	1	1.3	2	76226	2	1	166	N
FEB 2,88	FEB 1,88	755 750	1630 500	2	10.3	2	76227	2	1	88	H
FEB 4,88	FEB 3,88	755 755	2000 230	2	2.0	2	76228	2	1	98	H
FEB 8,88	FEB 7,88	755 755	900 2300	2	3.0	2	76229	2	1	32	NH
FEB 9,88	FEB 8,88	755 750	400 600	2	0.3	2	76230	2	1	280	N
FEB 10,88	FEB 9,88	750 755	2300 600	2	1.3	2	76231	2	1	117	
FEB 12,88	FEB 11,88	755 755	1800 730	2	5.3	2	76232	2	1	56	T
FEB 13,88	FEB 12,88	755 950	1000 600	2	3.3	2	76233	2	1	54	
FEB 15,88	FEB 14,88	755 755	200 730	3	5.2	2	76234	2	1	114	
FEB 16,88	FEB 15,88	755 755	2200 600	2	1.0	2	76235	2	1	115	
FEB 20,88	FEB 19,88	800 1030	1600 800	2	14.1	2	76236	2	1	48	N
FEB 21,88	FEB 20,88	1030 900	1600 2300	2	1.1	2	76237	2	1	338	N
FEB 23,88	FEB 22,88	800 800	1500 600	3	1.0	2	76238	2	1	193	NJHM
FEB 29,88	FEB 28,88	800 755	2100 700	2	6.4	2	76239	2	1	74	
MAR 2,88	MAR 1,88	755 755	400 700	2	1.0	2	76240	2	1	37	N
MAR 9,88	MAR 8,88	755 755	600 750	1	0.3	2	76241	2	1	468	N
MAR 13,88	MAR 12,88	755 1030	1500 2300	3	3.3	2	76242	2	1	143	N
MAR 14,88	MAR 13,88	1030 755	1300 600	2	0.3	2	76243	2	1	223	N
MAR 20,88	MAR 19,88	755 1030	900 2300	2	2.2	2	76244	2	1	162	N
MAR 26,88	MAR 25,88	800 1700	1030 1500	1	13.4	2	76246	2	1	111	
MAR 28,88	MAR 27,88	755 755	800 2000	2	3.1	2	76247	2	1	100	C
APR 3,88	APR 2,88	800 1300	200 1230	1	2.3	2	76248	2	1	150	N
APR 4,88	APR 3,88	1300 1400	1330 1300	1	9.3	2	76249	2	1	113	
APR 8,88	APR 7,88	755 755	****	1	2.3	2	76250	2	1	203	N
APR 14,88	APR 13,88	755 755	500 755	1	5.2	1	76251	2	1	110	
APR 15,88	APR 14,88	755 755	755 1100	1	4.1	1	76252	2	1	118	

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : BALSAM LAKE/DAILY/AEROCHEM

#06

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REMOVAL DATE	EXPOSURE DATE	VOLUME ML	CONDUCT. UMHO/CM	PH FIELD	PH LAB	TOTAL H+ TO PH8.3 MG/L	TOTAL H+ GRAN MG/L	SULPHATE MG/L	NITRATE AS N MG/L
JAN 4,88	JAN 3,88	153.0	32.5	4.33	4.37	*****	0.0803	D 2.45	1.19
JAN 5,88	JAN 4,88	401.0	LG 3.5	4.55	UG 6.98	*****	0.0147	0.40	0.17
JAN 6,88	JAN 5,88	16.0	LG 1.0	*****	4.32	*****	0.0761	LG 0.15	<W 0.02
JAN 9,88	JAN 8,88	28.0	D 8.0	*****	B 6.08	*****	D 0.0209	0.50	0.35
JAN 12,88	JAN 11,88	105.0	14.0	UG 5.95	UG 6.44	*****	0.0191	0.75	0.93
JAN 15,88	JAN 14,88	77.0	41.5	*****	4.17	*****	0.1060	3.40	1.26
JAN 18,88	JAN 17,88	192.0	49.5	4.00	4.01	*****	0.1370	2.15	1.15
JAN 19,88	JAN 18,88	82.0	59.0	*****	3.95	*****	0.1530	2.75	1.42
JAN 20,88	JAN 19,88	301.0	15.0	4.54	D 4.60	*****	0.0461	1.10	0.24
JAN 21,88	JAN 20,88	71.0	49.5	*****	4.09	*****	0.1210	3.50	1.34
JAN 24,88	JAN 23,88	251.0	37.0	4.16	4.15	*****	0.0984	1.70	1.09
JAN 25,88	JAN 24,88	12.0	!IS *****	*****	D 4.99	*****	0.0342	!IS *****	!IS *****
JAN 29,88	JAN 28,88	19.0	!IS *****	*****	UG 7.24	*****	0.0134	!IS *****	!IS *****
JAN 31,88	JAN 30,88	464.0	43.5	4.12	4.19	*****	0.0989	5.25	0.79
FEB 1,88	JAN 31,88	139.0	17.5	4.42	4.49	*****	0.0564	1.85	0.29
FEB 2,88	FEB 1,88	582.0	6.0	4.81	4.98	*****	0.0332	0.65	0.12
FEB 4,88	FEB 3,88	126.0	7.5	*****	UG 5.58	*****	0.0223	0.25	0.30
FEB 8,88	FEB 7,88	62.0	16.0	*****	5.21	*****	0.0316	0.65	0.82
FEB 9,88	FEB 8,88	54.0	31.0	*****	4.21	*****	0.0869	<W 0.05	1.02
FEB 10,88	FEB 9,88	98.0	28.0	*****	4.25	*****	0.0857	LG 0.20	1.06
FEB 12,88	FEB 11,88	191.0	32.0	*****	4.27	*****	D 0.0330	0.90	1.23
FEB 13,88	FEB 12,88	115.0	41.0	4.06	4.19	*****	0.1270	D 3.35	1.24
FEB 15,88	FEB 14,88	381.0	48.5	4.00	3.99	*****	0.1440	3.40	0.92
FEB 16,88	FEB 15,88	74.0	D 39.5	*****	4.28	*****	0.0891	3.40	1.42
FEB 20,88	FEB 19,88	442.0	24.0	4.30	4.32	*****	0.0784	1.25	0.66
FEB 21,88	FEB 20,88	239.0	24.0	4.34	4.38	*****	0.0738	1.80	0.65
FEB 23,88	FEB 22,88	124.0	26.5	UG 6.00	UG 7.22	*****	0.0210	3.55	1.40
FEB 29,88	FEB 28,88	304.0	28.0	4.33	4.33	*****	0.0823	1.15	1.14
MAR 2,88	MAR 1,88	24.0	17.5	*****	4.73	*****	0.0415	0.80	0.84
MAR 9,88	MAR 8,88	90.0	70.5	D 3.96	3.88	*****	0.1690	6.30	1.41
MAR 13,88	MAR 12,88	304.0	44.5	4.22	4.17	*****	0.1040	4.50	1.10
MAR 14,88	MAR 13,88	43.0	42.0	*****	4.16	*****	0.0989	D 3.05	1.05
MAR 20,88	MAR 19,88	229.0	15.5	UG 5.04	5.06	*****	D 0.0327	1.35	0.67
MAR 26,88	MAR 25,88	957.0	30.0	4.31	4.39	*****	0.0727	3.05	0.63
MAR 28,88	MAR 27,88	200.0	D 20.5	4.58	4.86	*****	0.0421	2.05	0.46
APR 3,88	APR 2,88	222.0	49.0	4.03	4.06	*****	0.1270	4.20	0.68
APR 4,88	APR 3,88	676.0	18.0	4.40	4.50	*****	0.0598	1.95	0.32
APR 8,88	APR 7,88	300.0	86.0	3.90	3.77	*****	0.2110	6.80	1.64
APR 14,88	APR 13,88	367.0	87.0	3.77	3.77	*****	0.2090	6.45	2.62
APR 15,88	APR 14,88	312.0	31.5	4.28	4.37	*****	0.0660	3.55	0.65

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : BALSAM LAKE/DAILY/AEROCHEM

#06

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REMOVAL DATE	EXPOSURE DATE	CALCIUM MG/L	CHLORIDE MG/L	MAGNESIUM MG/L	POTASSIUM MG/L	SODIUM MG/L	AMMONIUM AS N MG/L	FREE H+ LAB MG/L
JAN 4,88	JAN 3,88	0.94	0.37	0.110	0.025	0.115	D 0.455	0.0427
JAN 5,88	JAN 4,88	0.60	0.14	0.070	<T 0.010	0.065	<T 0.005	UG 0.0001
JAN 6,88	JAN 5,88	!IS *****	0.26	!IS *****	!IS *****	!IS *****	<W 0.005	0.0479
JAN 9,88	JAN 8,88	!IS *****	0.45	!IS *****	!IS *****	!IS *****	0.095	B 0.0008
JAN 12,88	JAN 11,88	1.38	0.56	0.220	0.035	0.200	0.035	UG 0.0004
JAN 15,88	JAN 14,88	0.72	0.34	0.080	0.060	0.080	0.845	0.0676
JAN 18,88	JAN 17,88	D 0.14	D 0.31	<T 0.020	<T 0.015	0.100	0.205	0.0977
JAN 19,88	JAN 18,88	D 0.16	0.17	<T 0.010	<T 0.020	0.045	0.400	0.1122
JAN 20,88	JAN 19,88	<T 0.10	0.05	<T 0.005	<T 0.010	0.025	0.085	D 0.0251
JAN 21,88	JAN 20,88	0.35	0.17	0.040	0.060	0.070	0.730	0.0813
JAN 24,88	JAN 23,88	0.24	0.36	0.040	<T 0.010	0.075	0.260	0.0708
JAN 25,88	JAN 24,88	<T 0.06	!IS *****	<T 0.010	<T 0.015	0.090	0.190	D 0.0102
JAN 29,88	JAN 28,88	0.89	!IS *****	0.035	<T 0.010	0.105	0.040	UG 0.0001
JAN 31,88	JAN 30,88	0.72	1.06	0.125	0.075	UG 0.705	D 0.680	0.0646
FEB 1,88	JAN 31,88	0.16	0.13	<T 0.020	0.030	0.105	D 0.220	0.0324
FEB 2,88	FEB 1,88	<T 0.02	<W 0.01	<W 0.005	<T 0.010	<T 0.015	0.050	0.0105
FEB 4,88	FEB 3,88	<T 0.04	0.96	<T 0.005	B 0.805	0.490	0.020	UG 0.0026
FEB 8,88	FEB 7,88	D 0.71	D 1.02	D 0.065	B 0.600	D 0.550	0.080	0.0062
FEB 9,88	FEB 8,88	!IS *****	0.84	!IS *****	!IS *****	!IS *****	0.030	0.0617
FEB 10,88	FEB 9,88	0.36	0.43	0.030	0.090	0.175	<T 0.020	0.0562
FEB 12,88	FEB 11,88	0.58	D 0.72	0.070	<T 0.015	0.520	0.070	0.0537
FEB 13,88	FEB 12,88	0.46	B 1.27	0.040	0.085	U 2.260	0.420	0.0646
FEB 15,88	FEB 14,88	0.22	0.33	<T 0.020	0.030	0.150	0.360	0.1023
FEB 16,88	FEB 15,88	1.24	D 0.52	0.110	0.065	0.290	0.680	0.0525
FEB 20,88	FEB 19,88	0.22	0.16	0.025	<W 0.005	0.075	0.170	0.0479
FEB 21,88	FEB 20,88	<T 0.06	0.09	<T 0.010	<W 0.005	0.040	0.500	0.0417
FEB 23,88	FEB 22,88	2.04	0.76	0.270	0.090	0.495	0.900	UG 0.0001
FEB 29,88	FEB 28,88	0.40	0.36	0.055	<T 0.025	0.150	0.400	0.0468
MAR 2,88	MAR 1,88	0.42	0.26	0.040	<T 0.015	0.100	0.510	0.0186
MAR 9,88	MAR 8,88	0.76	0.29	0.075	0.045	0.115	0.890	0.1318
MAR 13,88	MAR 12,88	0.72	0.22	0.060	0.040	0.090	0.900	0.0676
MAR 14,88	MAR 13,88	D 0.26	0.28	0.025	<T 0.010	0.115	0.780	0.0692
MAR 20,88	MAR 19,88	0.74	0.40	0.065	<T 0.015	0.180	0.390	0.0087
MAR 26,88	MAR 25,88	0.60	0.26	0.065	0.040	0.210	0.370	0.0407
MAR 28,88	MAR 27,88	0.34	0.07	0.045	0.050	0.050	D 0.500	0.0138
APR 3,88	APR 2,88	0.34	0.37	0.050	0.035	0.205	0.300	0.0871
APR 4,88	APR 3,88	0.12	<T 0.02	<T 0.005	<T 0.020	<T 0.020	0.390	0.0316
APR 8,88	APR 7,88	D 0.76	0.30	D 0.080	0.135	0.115	0.530	0.1698
APR 14,88	APR 13,88	1.12	0.53	0.	0.050	0.110	1.090	0.1698
APR 15,88	APR 14,88	0.44	0.11	0.075	0.065	0.030	0.650	0.0427

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : BALSAM LAKE/DAILY/AEROCHEM

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REMOVAL DATE	EXPOSURE DATE	SAMPLING START/END HR. HR.	PRECIP START/END HR. HR.	SAMPLE TYPE 01-RAIN 02-SNOW 03-COMP/04-OTHER	GAUGE DEPTH(MM)	GAUGE TYPE 01-STD. 02-NIPHER	SAMPLE NUMBER	PROJECT CODE 02-APIOS 03-SPECIAL	SUBPROJECT CODE 01-MOE 03-AES	SAMPLER EFFICI- ENCY (%)	COMMENTS FIELD OFFICE
APR 18,88	APR 17,88	755 755	2000 600	3	6.4	1	76253	2	1	104	JHCM
APR 19,88	APR 18,88	755 750	1700 700	3	0.1	1	76254	2	1	233	N
APR 21,88	APR 20,88	755 755	1700 400	3	4.2	1	76255	2	1	101	JH
APR 24,88	APR 23,88	755 930	9000 6000	1	8.3	1	76256	2	1	84	N
APR 25,88	APR 24,88	930 755	1000 2300	1	2.2	1	76257	2	1	140	N
APR 26,88	APR 25,88	755 750	600 750	1	8.2	1	76258	2	1	86	H
APR 27,88	APR 26,88	750 755	750 1100	1	2.0	1	76259	2	1	37	N
APR 28,88	APR 27,88	755 755	1700 100	1	6.2	1	76260	2	1	105	
APR 29,88	APR 28,88	755 755	600 745	1	2.1	1	76261	2	1	50	
APR 30,88	APR 29,88	755 945	900 2000	1	2.2	1	76262	2	1	126	NC
MAY 9,88	MAY 8,88	800 755	300 600	1	0.1	1	76263	2	1	140	N
MAY 10,88	MAY 9,88	755 750	****	1	8.1	1	76264	2	1	108	B
MAY 11,88	MAY 10,88	750 750	900 1400	1	1.1	1	76265	2	1	100	
MAY 14,88	MAY 13,88	800 1100	900 1100	1	6.3	1	76266	2	1	108	J
MAY 16,88	MAY 15,88	800 755	2100 600	1	21.4	1	76267	2	1	99	
MAY 17,88	MAY 16,88	755 755	1600 600	1	6.3	1	76270	2	1	93	
MAY 18,88	MAY 17,88	755 755	930 1100	1	6.0	1	76271	2	1	106	
MAY 20,88	MAY 19,88	800 755	1700 700	1	3.3	1	76272	2	1	112	
MAY 21,88	MAY 20,88	755 1800	900 1600	1	13.3	1	76273	2	1	107	
MAY 25,88	MAY 24,88	800 755	300 700	1	3.3	1	76274	2	1	105	
JUN 2,88	JUN 1,88	800 755	1000 1500	1	0.4	1	76275	2	1	179	N
JUN 3,88	JUN 2,88	755 755	2000 2230	1	5.0	1	76276	2	1	19	C NC
JUN 7,88	JUN 6,88	800 755	1700 1900	1	0.3	1	76277	2	1	124	N
JUN 8,88	JUN 7,88	755 755	2000 2100	1	0.1	1	76278	2	1	218	N
JUN 20,88	JUN 19,88	755 755	400 500	1	0.3	1	76279	2	1	499	C
JUN 22,88	JUN 21,88	755 755	2330 730	1	8.4	1	76280	2	1	109	J
JUN 23,88	JUN 22,88	755 750	830 2000	1	7.2	1	76281	2	1	100	
JUN 26,88	JUN 24,88	1030 1030	2000 900	1	8.1	1	76282	2	1	110	C Y2
JUN 29,88	JUN 28,88	755 755	1000 1300	1	7.2	1	76283	2	1	101	
JUL 11,88	JUL 10,88	800 800	200 750	1	20.1	1	76284	2	1	32	N
JUL 14,88	JUL 13,88	800 750	300 700	1	5.3	*	76287	2	1	133	C N
JUL 16,88	JUL 15,88	800 840	400 600	1	2.1	1	76288	2	1	97	
JUL 17,88	JUL 16,88	1000 1000	200 500	1	2.0	1	76289	2	1	86	
JUL 25,88	JUL 24,88	755 755	1600 1800	1	8.1	1	76290	2	1	90	C
JUL 26,88	JUL 25,88	755 750	2330 500	1	1.1	1	76291	2	1	102	
JUL 27,88	JUL 26,88	750 755	1500 1700	1	2.3	1	76292	2	1	115	
JUL 31,88	JUL 30,88	800 1035	1300 2000	1	2.3	1	76293	2	1	96	
AUG 2,88	AUG 1,88	735 735	800 930	1	1.2	1	76294	2	1	78	
AUG 5,88	AUG 4,88	755 755	1600 2100	1	22.8	1	76295	2	1	35	C N
AUG 7,88	AUG 6,88	1000 1000	500 700	1	9.0	1	76296	2	1	97	

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : BALSAM LAKE/DAILY/AEROCHEM

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REMOVAL DATE	EXPOSURE DATE	VOLUME ML	CONDUCT. UMHO/CM	PH FIELD	PH LAB	TOTAL H+ TO PH8.3 MG/L	TOTAL H+ GRAN MG/L	SULPHATE MG/L	NITRATE AS N MG/L					
APR 18,88	APR 17,88	430.0	12.0	UG	6.23	UG	7.24	*****	0.0152	1.35	0.38			
APR 19,88	APR 18,88	15.0	4.0	*****	UG	6.92	*****	LG	0.0119	0.60	0.06			
APR 21,88	APR 20,88	272.0	26.5	UG	6.36	UG	7.07	*****	0.0168	3.90	0.95			
APR 24,88	APR 23,88	450.0	58.0		4.04		3.98	*****	0.1460	5.55	1.64			
APR 25,88	APR 24,88	198.0	62.5		4.02		3.99	*****	0.1440	5.55	1.63			
APR 26,88	APR 25,88	456.0	31.5		4.71		5.10	*****	0.0351	4.65	1.19			
APR 27,88	APR 26,88	48.0	32.0	*****			4.48	*****	0.0622	3.30	1.12			
APR 28,88	APR 27,88	420.0	44.0		4.07		4.12	*****	D	0.1100	3.55	0.93		
APR 29,88	APR 28,88	68.0	29.0	*****			4.34	*****		0.0703	1.90	0.51		
APR 30,88	APR 29,88	179.0	8.5		4.89		5.02	*****		0.0283	0.45	0.09		
MAY 9,88	MAY 8,88	9.0	72.5	*****	UCR	3.92	*****	UCR	0.1740	8.90	0.71			
MAY 10,88	MAY 9,88	561.0	36.0		4.15		4.24	*****		0.0888	4.15	0.51		
MAY 11,88	MAY 10,88	71.0	24.5	*****	UG	6.25	*****		0.0222	4.10	0.87			
MAY 14,88	MAY 13,88	439.0	17.0		4.91	UG	5.99	*****		0.0209	3.20	0.53		
MAY 16,88	MAY 15,88	1370.0	42.0		4.06		4.11	*****		0.1070	4.30	0.64		
MAY 17,88	MAY 16,88	376.0	14.0		4.50		4.75	*****		0.0408	1.30	0.32		
MAY 18,88	MAY 17,88	409.0	10.5		4.58		4.78	*****		0.0362	1.05	0.15		
MAY 20,88	MAY 19,88	237.0	D	3.5	B	5.12	5.39	*****		0.0205	D	0.35	0.15	
MAY 21,88	MAY 20,88	918.0	D	45.5	D	4.03	D	4.03	*****	D	0.1280	D	3.80	0.60
MAY 25,88	MAY 24,88	224.0		11.5		4.59	4.70	*****		0.0407		1.50	0.10	
JUN 2,88	JUN 1,88	46.0		11.5	*****		4.76	*****		0.0415		0.60	0.37	
JUN 3,88	JUN 2,88	61.0		42.0	*****	UG	7.59	*****	LG	0.0136		3.90	0.95	
JUN 7,88	JUN 6,88	24.0		5.5	*****		5.10	*****		0.0296		0.95	0.02	
JUN 8,88	JUN 7,88	14.0		3.5	*****		5.12	*****		0.0289		0.45	<T	0.02
JUN 20,88	JUN 19,88	96.0		65.0	*****	UG	6.40	*****		0.0235	10.50	11.5	*****	
JUN 22,88	JUN 21,88	589.0		16.0	4.35		4.90	*****		0.0372		2.30	0.53	
JUN 23,88	JUN 22,88	464.0		19.0	4.72		4.72	*****		0.0521		2.25	0.30	
JUN 26,88	JUN 24,88	573.0		54.5	4.30		4.24	*****		0.1050		6.90	1.37	
JUN 29,88	JUN 28,88	467.0		7.0	4.50		4.92	*****		0.0346		0.60	0.06	
JUL 11,88	JUL 10,88	422.0		37.0	4.13		4.20	*****		0.0825		5.05	0.47	
JUL 14,88	JUL 13,88	453.0	D	21.5	D	4.38	D	4.57	*****	D	0.0492		2.50	0.42
JUL 16,88	JUL 15,88	131.0		10.0	4.67		5.09	*****		0.0251		0.85	0.35	
JUL 17,88	JUL 16,88	111.0		25.5	4.35		4.51	*****		0.0594		1.90	0.77	
JUL 25,88	JUL 24,88	469.0		9.0	4.68		5.02	*****		0.0275		0.75	0.22	
JUL 26,88	JUL 25,88	72.0		36.5	*****		4.28	*****		0.0808		3.15	0.82	
JUL 27,88	JUL 26,88	170.0		44.0	4.21		4.14	*****		0.1030		3.30	0.92	
JUL 31,88	JUL 30,88	143.0		25.5	4.30		4.31	*****		0.0653		2.60	0.54	
AUG 2,88	AUG 1,88	60.0		9.5	*****	UG	6.39	*****		0.0191		1.05	0.37	
AUG 5,88	AUG 4,88	520.0	>	100.0	3.74		3.85	*****		0.2240	13.50		1.04	
AUG 7,88	AUG 6,88	562.0		11.5	4.54		4.66	*****		0.0412		1.25	0.22	

ONTARIO MINISTRY OF THE ENVIRONMENT
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APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : BALSAM LAKE/DAILY/AEROCHEM

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REMOVAL DATE	EXPOSURE DATE	CALCIUM MG/L	CHLORIDE MG/L	MAGNESIUM MG/L	POTASSIUM MG/L	SODIUM MG/L	AMMONIUM AS N MG/L	FREE H+ LAB MG/L
APR 18,88	APR 17,88	0.64	0.06	0.125	<T 0.020	<T 0.020	0.360	UG 0.0001
APR 19,88	APR 18,88	!IS *****	0.08	!IS *****	!IS *****	!IS *****	!IS *****	UG 0.0001
APR 21,88	APR 20,88	1.04	0.19	0.190	0.065	0.060	1.390	UG 0.0001
APR 24,88	APR 23,88	0.94	0.33	0.130	0.065	0.055	1.080	0.1047
APR 25,88	APR 24,88	D 0.76	0.31	D 0.115	0.060	0.050	D 1.070	0.1023
APR 26,88	APR 25,88	0.78	0.14	0.175	0.040	0.050	1.530	0.0079
APR 27,88	APR 26,88	0.72	0.12	0.055	0.035	0.070	!IS *****	0.0331
APR 28,88	APR 27,88	0.40	0.17	0.035	0.025	<T 0.020	0.440	0.0759
APR 29,88	APR 28,88	0.16	0.09	<T 0.015	<T 0.010	<T 0.015	0.160	0.0457
APR 30,88	APR 29,88	<T 0.04	0.05	<W 0.005	<T 0.005	<T 0.010	0.040	0.0095
MAY 9,88	MAY 8,88	0.74	0.31	0.070	0.130	0.100	0.750	UCR 0.1202
MAY 10,88	MAY 9,88	0.34	0.16	0.040	0.030	0.025	0.520	0.0575
MAY 11,88	MAY 10,88	0.80	0.13	0.070	0.090	0.030	1.620	UG 0.0006
MAY 14,88	MAY 13,88	0.80	0.10	D 0.115	0.045	0.030	0.860	UG 0.0010
MAY 16,88	MAY 15,88	0.34	0.12	0.045	<T 0.020	<T 0.010	0.540	0.0776
MAY 17,88	MAY 16,88	0.14	<T 0.04	<T 0.020	<T 0.020	0.035	0.250	0.0178
MAY 18,88	MAY 17,88	<T 0.02	<T 0.03	<W 0.005	<T 0.015	0.035	0.100	0.0166
MAY 20,88	MAY 19,88	<T 0.06	<T 0.02	<T 0.010	0.040	<T 0.010	0.092	0.0041
MAY 21,88	MAY 20,88	D 0.12	D 0.06	<T 0.010	<T 0.015	<T 0.005	D 0.242	D 0.0933
MAY 25,88	MAY 24,88	0.14	<T 0.02	<T 0.015	0.060	<T 0.005	0.064	0.0200
JUN 2,88	JUN 1,88	0.46	0.33	0.050	0.115	0.040	LG 0.014	0.0174
JUN 3,88	JUN 2,88	5.50	0.27	0.700	UG 0.335	0.155	0.174	UG 0.0000
JUN 7,88	JUN 6,88	!IS *****	0.05	!IS *****	!IS *****	!IS *****	LG 0.014	0.0079
JUN 8,88	JUN 7,88	!IS *****	<T 0.04	!IS *****	!IS *****	!IS *****	LG 0.026	0.0076
JUN 20,88	JUN 19,88	!IS *****	0.72	!IS *****	!IS *****	!IS *****	1.350	UG 0.0004
JUN 22,88	JUN 21,88	0.48	0.10	0.080	0.030	0.035	0.622	0.0126
JUN 23,88	JUN 22,88	0.28	0.08	0.045	0.030	<T 0.020	0.346	0.0191
JUN 26,88	JUN 24,88	1.44	0.33	0.145	0.140	0.070	1.320	0.0575
JUN 29,88	JUN 28,88	0.12	<T 0.04	<T 0.010	<T 0.015	<T 0.010	<T 0.016	0.0120
JUL 11,88	JUL 10,88	0.24	0.07	<T 0.015	0.030	<T 0.020	0.912	0.0631
JUL 14,88	JUL 13,88	0.32	0.08	0.060	D 0.060	0.030	0.384	D 0.0269
JUL 16,88	JUL 15,88	0.22	0.05	0.030	0.030	0.035	0.220	0.0081
JUL 17,88	JUL 16,88	0.36	0.17	0.045	0.060	0.090	0.420	0.0309
JUL 25,88	JUL 24,88	D 0.22	<T 0.04	<T 0.015	0.030	<T 0.010	0.116	0.0095
JUL 26,88	JUL 25,88	0.50	0.14	0.040	0.065	0.040	0.426	0.0525
JUL 27,88	JUL 26,88	0.26	0.11	<T 0.015	0.030	<T 0.015	0.486	0.0724
JUL 31,88	JUL 30,88	0.40	0.07	0.055	<T 0.010	<T 0.020	0.278	0.0490
AUG 2,88	AUG 1,88	0.26	0.06	0.045	0.055	0.030	0.554	UG 0.0004
AUG 5,88	AUG 4,88	1.10	0.38	0.215	0.075	0.050	1.540	0.1413
AUG 7,88	AUG 6,88	<T 0.08	<T 0.02	<T 0.010	<T 0.005	<T 0.005	0.164	0.0219

ONTARIO MINISTRY OF THE ENVIRONMENT
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APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : BALSAM LAKE/DAILY/AEROCHEM

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REMOVAL DATE	EXPOSURE DATE	SAMPLING START/END HR. HR.	PRECIP START/END HR. HR.	SAMPLE TYPE 01-RAIN 02-SNOW 03-COMP/04-OTHER	GAUGE DEPTH(MM)	GAUGE TYPE 01-STD. 02-NIPHER	SAMPLE NUMBER	PROJECT CODE 02-APIOS 03-SPECIAL	SUBPROJECT CODE 01-MOE 03-AES	SAMPLER EFFICI- ENCY (%)	COMMENTS FIELD OFFICE
AUG 10,88	AUG 9,88	755 755	815 2100	1	44.3	1	76297	2	1	105	
AUG 15,88	AUG 14,88	755 755	900 600	1	1.0	1	76298	2	1	82	
AUG 16,88	AUG 15,88	755 755	830 1400	1	0.4	1	76299	2	1	214	N
AUG 17,88	AUG 16,88	755 750	700 745	1	3.1	1	76300	2	1	98	HM
AUG 18,88	AUG 17,88	755 755	900 1400	1	12.4	1	76301	2	1	54	
AUG 24,88	AUG 23,88	755 755	1800 730	1	10.1	1	76302	2	1	69	
AUG 25,88	AUG 24,88	755 750	1600 500	1	12.0	1	76303	2	1	105	
AUG 26,88	AUG 25,88	750 755	1300 500	1	9.1	1	76304	2	1	104	HM
AUG 28,88	AUG 27,88	800 1030	100 600	1	1.1	1	76305	2	1	70	C
AUG 31,88	AUG 30,88	755 755	1400 500	1	1.0	1	76306	2	1	59	M
SEP 4,88	SEP 3,88	900 900	1400 800	1	32.3	1	76307	2	1	80	NHCH
SEP 5,88	SEP 4,88	900 1000	930 400	1	20.1	1	76308	2	1	130	N
SEP 7,88	SEP 6,88	750 750	2100 2300	1	1.3	1	76309	2	1	93	
SEP 13,88	SEP 12,88	755 755	2000 600	1	3.4	1	76310	2	1	95	
SEP 15,88	SEP 14,88	755 755	1800 1900	1	2.0	1	76311	2	1	85	
SEP 18,88	SEP 17,88	1000 1000	900 2000	1	7.0	1	76312	2	1	92	
SEP 20,88	SEP 19,88	755 755	200 700	1	2.4	1	76313	2	1	119	
SEP 21,88	SEP 20,88	755 755	1400 700	1	1.2	1	76314	2	1	102	
SEP 22,88	SEP 21,88	755 750	600 730	1	3.2	1	76315	2	1	12	C N
SEP 23,88	SEP 22,88	750 755	2100 700	1	12.4	1	76316	2	1	55	C
SEP 27,88	SEP 26,88	755 755	1900 2300	1	1.1	1	76317	2	1	45	
SEP 28,88	SEP 27,88	755 750	1400 1700	1	16.2	1	76318	2	1	98	N
OCT 2,88	OCT 1,88	900 900	300 900	1	15.2	1	76319	2	1	98	N
OCT 3,88	OCT 2,88	900 755	****	1	0.4	1	76320	2	1	77	N
OCT 5,88	OCT 4,88	755 755	1815 730	1	22.1	1	76321	2	1	110	N
OCT 7,88	OCT 6,88	755 755	600 700	1	0.4	1	76322	2	1	77	N
OCT 8,88	OCT 7,88	1000 1000	1400 2000	1	0.4	1	76323	2	1	15	NC
OCT 11,88	OCT 10,88	755 755	1100 700	1	8.2	1	76324	2	1	59	N
OCT 16,88	OCT 15,88	755 755	300 ****	1	6.0	1	76325	2	1	118	C
OCT 17,88	OCT 16,88	755 755	100 ****	1	6.0	1	76326	2	1	118	
OCT 22,88	OCT 21,88	1230 1230	1500 2400	1	9.2	1	76327	2	1	98	
OCT 24,88	OCT 23,88	755 755	2000 400	1	5.2	1	76328	2	1	88	
OCT 25,88	OCT 24,88	755 750	1400 700	1	4.4	1	76329	2	1	97	
OCT 26,88	OCT 25,88	755 755	1000 600	1	5.1	1	76330	2	1	98	JHM
OCT 27,88	OCT 26,88	755 755	1300 2100	1	0.4	2	76331	2	1	66	N
OCT 28,88	OCT 27,88	755 755	2000 730	1	5.0	2	76332	2	1	107	
OCT 30,88	OCT 29,88	830 930	830 500	2	4.0	2	76333	2	1	91	CM
NOV 1,88	OCT 31,88	755 755	600 700	1	0.3	2	76334	2	1	202	N
NOV 5,88	NOV 4,88	700 700	****	1	14.0	2	84956	2	1	19	N
NOV 9,88	NOV 8,88	700 755	945 600	1	2.4	1	84954	2	1	289	N

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : BALSAM LAKE/DAILY/AEROCHEM

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REMOVAL DATE	EXPOSURE DATE	VOLUME ML	CONDUCT. UMHO/CM	PH FIELD	PH LAB	TOTAL H+ TO PH8.3 MG/L	TOTAL H+ GRAN MG/L	SULPHATE MG/L	NITRATE AS N MG/L
AUG 10,88	AUG 9,88	2985.0	52.0	3.93	4.01	*****	0.1290	5.80	0.63
AUG 15,88	AUG 14,88	53.0	27.0	*****	4.49	*****	0.0636	3.75	0.94
AUG 16,88	AUG 15,88	55.0	3.0	*****	5.68	*****	0.0215	0.60	0.10
AUG 17,88	AUG 16,88	195.0	6.5	4.58	4.94	*****	0.0321	0.75	0.30
AUG 18,88	AUG 17,88	435.0	21.0	4.29	4.41	*****	0.0669	2.65	0.51
AUG 24,88	AUG 23,88	453.0	50.0	3.92	3.93	*****	0.1490	4.90	0.83
AUG 25,88	AUG 24,88	811.0	16.5	4.56	4.72	*****	0.0427	2.00	0.37
AUG 26,88	AUG 25,88	607.0	5.0	6.28	6.81	*****	0.0162	0.95	0.17
AUG 28,88	AUG 27,88	50.0	100.0	*****	3.48	*****	0.3400	21.30	2.15
AUG 31,88	AUG 30,88	38.0	4.5	*****	6.73	*****	0.0136	0.40	0.21
SEP 4,88	SEP 3,88	1662.0	2.0	4.99	5.06	*****	0.0240	0.20	0.02
SEP 5,88	SEP 4,88	1685.0	31.0	4.07	4.05	*****	0.0984	3.35	0.29
SEP 7,88	SEP 6,88	78.0	7.0	*****	6.43	*****	0.0161	1.35	0.14
SEP 13,88	SEP 12,88	208.0	21.5	4.27	4.31	*****	0.0809	2.55	0.40
SEP 15,88	SEP 14,88	110.0	12.0	4.53	4.55	*****	0.0534	1.80	0.05
SEP 18,88	SEP 17,88	416.0	33.0	4.13	4.09	*****	0.1180	3.35	0.50
SEP 20,88	SEP 19,88	184.0	51.0	3.94	3.98	*****	0.1490	5.40	0.52
SEP 21,88	SEP 20,88	79.0	30.5	*****	6.94	*****	0.0196	6.15	1.21
SEP 22,88	SEP 21,88	25.0	10.5	*****	7.07	*****	0.0178	3.15	0.14
SEP 23,88	SEP 22,88	438.0	19.0	4.09	4.19	*****	0.0934	2.80	0.63
SEP 27,88	SEP 26,88	32.0	14.0	*****	7.60	*****	0.0166	1.50	0.22
SEP 28,88	SEP 27,88	1023.0	18.0	4.45	4.76	*****	0.0406	4.10	0.49
OCT 2,88	OCT 1,88	960.0	11.0	4.58	4.65	*****	0.0436	1.25	0.20
OCT 3,88	OCT 2,88	20.0	13.5	*****	4.52	*****	0.0519	1.85	0.06
OCT 5,88	OCT 4,88	1570.0	9.0	4.66	4.71	*****	0.0392	0.75	0.26
OCT 7,88	OCT 6,88	20.0	4.5	*****	4.91	*****	0.0342	0.75	0.15
OCT 8,88	OCT 7,88	4.0	*****	*****	*****	*****	*****	*****	*****
OCT 11,88	OCT 10,88	312.0	10.0	4.73	4.86	*****	0.0388	2.30	0.40
OCT 16,88	OCT 15,88	456.0	22.0	4.34	4.29	*****	0.0734	2.05	0.41
OCT 17,88	OCT 16,88	456.0	22.0	4.33	4.31	*****	0.0739	1.95	0.39
OCT 22,88	OCT 21,88	581.0	25.0	4.32	4.22	*****	0.0816	1.30	0.76
OCT 24,88	OCT 23,88	294.0	24.5	4.30	4.19	*****	0.0843	1.50	0.68
OCT 25,88	OCT 24,88	276.0	13.0	4.76	4.74	*****	0.0423	1.90	0.45
OCT 26,88	OCT 25,88	322.0	8.5	6.83	7.67	*****	0.0141	0.85	0.09
OCT 27,88	OCT 26,88	17.0	7.0	*****	7.38	*****	0.0140	0.85	0.10
OCT 28,88	OCT 27,88	345.0	30.0	4.24	4.13	*****	0.1150	2.95	0.86
OCT 30,88	OCT 29,88	234.0	27.0	7.51	7.79	*****	0.0126	1.75	0.15
NOV 1,88	OCT 31,88	39.0	59.5	*****	3.95	*****	0.1530	2.65	0.15
NOV 5,88	NOV 4,88	175.0	54.0	*****	3.97	*****	0.1450	5.80	1.31
NOV 9,88	NOV 8,88	445.0	19.0	*****	4.36	*****	0.0861	1.65	0.47

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : BALSAM LAKE/DAILY/AEROCHEM

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REMOVAL DATE	EXPOSURE DATE	CALCIUM MG/L	CHLORIDE MG/L	MAGNESIUM MG/L	POTASSIUM MG/L	SODIUM MG/L	AMMONIUM AS N MG/L	FREE H+ LAB MG/L
AUG 10,88	AUG 9,88	0.36	0.12	0.045	<T 0.020	<T 0.020	0.530	0.0977
AUG 15,88	AUG 14,88	1.04	0.20	0.100	0.055	0.060	0.546	0.0324
AUG 16,88	AUG 15,88	0.18	<T 0.03	<T 0.015	0.035	<T 0.025	0.126	UG 0.0021
AUG 17,88	AUG 16,88	<T 0.08	<T 0.04	<T 0.015	<T 0.020	<T 0.020	0.166	0.0115
AUG 18,88	AUG 17,88	0.26	0.08	0.055	<T 0.025	<T 0.020	0.380	0.0389
AUG 24,88	AUG 23,88	0.20	0.08	<T 0.020	0.025	<T 0.020	0.360	0.1175
AUG 25,88	AUG 24,88	0.18	0.07	<T 0.020	<T 0.015	0.075	0.390	0.0191
AUG 26,88	AUG 25,88	0.24	0.05	0.030	0.035	D 0.040	0.320	UG 0.0002
AUG 28,88	AUG 27,88	1.92	0.69	0.220	0.235	0.150	1.640	LG 0.3311
AUG 31,88	AUG 30,88	D 0.56	0.10	D 0.040	0.035	D 0.105	0.046	B 0.0002
SEP 4,88	SEP 3,88	<T 0.04	<W 0.01	<W 0.005	<T 0.005	<T 0.010	<T 0.016	D 0.0087
SEP 5,88	SEP 4,88	<T 0.04	0.07	<T 0.005	<T 0.015	<T 0.015	D 0.210	0.0891
SEP 7,88	SEP 6,88	0.54	0.13	0.065	0.055	0.095	0.206	B 0.0004
SEP 13,88	SEP 12,88	0.34	0.09	0.040	0.035	0.040	0.300	0.0490
SEP 15,88	SEP 14,88	0.16	<W 0.01	<T 0.010	<T 0.025	<T 0.025	0.106	0.0282
SEP 18,88	SEP 17,88	0.20	0.09	<T 0.015	<T 0.020	<T 0.015	0.316	D 0.0813
SEP 20,88	SEP 19,88	0.12	0.31	<T 0.020	0.040	0.120	0.200	0.1047
SEP 21,88	SEP 20,88	2.32	0.36	0.265	0.220	0.070	1.570	UG 0.0001
SEP 22,88	SEP 21,88	!IS *****	0.12	!IS *****	!IS *****	!IS *****	0.266	B 0.0001
SEP 23,88	SEP 22,88	0.22	0.13	<T 0.025	0.045	0.025	0.370	0.0646
SEP 27,88	SEP 26,88	!IS *****	0.18	!IS *****	!IS *****	!IS *****	0.220	UG 0.0000
SEP 28,88	SEP 27,88	0.84	0.09	0.095	0.030	0.025	0.720	0.0174
OCT 2,88	OCT 1,88	0.10	<T 0.03	<T 0.015	<T 0.005	<T 0.020	0.146	0.0224
OCT 3,88	OCT 2,88	!IS *****	0.11	!IS *****	!IS *****	!IS *****	<T 0.016	0.0302
OCT 5,88	OCT 4,88	0.10	<W 0.01	<W 0.005	<W 0.005	<T 0.005	0.140	0.0195
OCT 7,88	OCT 6,88	0.16	0.12	<T 0.010	0.045	0.105	<T 0.020	0.0123
OCT 8,88	OCT 7,88	*****	*****	*****	*****	*****	*****	*****
OCT 11,88	OCT 10,88	0.24	0.07	0.040	0.040	<T 0.015	0.646	D 0.0138
OCT 16,88	OCT 15,88	0.16	<T 0.03	<T 0.020	<T 0.025	<T 0.025	0.206	0.0513
OCT 17,88	OCT 16,88	0.18	<T 0.04	<T 0.020	<T 0.025	0.025	0.206	0.0490
OCT 22,88	OCT 21,88	0.18	0.06	0.025	0.035	<T 0.015	0.180	D 0.0603
OCT 24,88	OCT 23,88	<T 0.06	<T 0.03	<T 0.005	<T 0.020	<T 0.010	0.186	0.0646
OCT 25,88	OCT 24,88	0.48	0.06	0.045	0.030	0.105	0.290	0.0182
OCT 26,88	OCT 25,88	1.72	<W 0.01	0.035	<T 0.015	<T 0.010	0.116	UG 0.0000
OCT 27,88	OCT 26,88	1.34	<T 0.02	0.035	<T 0.025	<T 0.025	!IS *****	B 0.0000
OCT 28,88	OCT 27,88	0.64	0.10	D 0.055	0.035	<T 0.020	0.286	0.0741
OCT 30,88	OCT 29,88	B 3.10	<T 0.02	D 0.080	D 0.070	0.025	0.170	B 0.0000
NOV 1,88	OCT 31,88	2.08	0.61	0.245	0.085	0.120	!IS *****	0.1122
NOV 5,88	NOV 4,88	D 1.14	0.39	D 0.125	0.040	0.155	0.546	0.1072
NOV 9,88	NOV 8,88	0.14	0.11	<T 0.010	<T 0.010	<T 0.010	D 0.280	D 0.0437

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : BALSAM LAKE/DAILY/AEROCHEM #06

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REMOVAL DATE	EXPOSURE DATE	SAMPLING START/END HR. HR.	PRECIP START/END HR. HR.	SAMPLE TYPE 01-RAIN 02-SNOW 03-COMP/04-OTHER	GAUGE DEPTH(MM)	GAUGE TYPE 01-STD. 02-NIPHER	SAMPLE NUMBER	PROJECT CODE 02-APIOS 03-SPECIAL	SUBPROJECT CODE 01-MOE 03-AES	SAMPLER EFFICI- ENCY (%)	COMMENTS FIELD OFFICE
NOV 10,88	NOV 9,88	755 755	600 745	1	72.0	2	40001	2	1	12	Q N
NOV 15,88	NOV 13,88	1400 755	800 1500	1	0.4	2	40004	2	1	245	Q NHZ
NOV 18,88	NOV 15,88	800 750	1800 600	2	2.4	2	40005	2	1	157	Q NHZ
NOV 20,88	NOV 18,88	800 1500	2100 1430	1	3.1	2	40006	2	1	117	Q HCMZ
NOV 29,88	NOV 28,88	755 755	1400 2000	3	2.4	2	40013	2	1	137	N
DEC 1,88	NOV 30,88	755 755	1000 600	2	4.4	2	40014	2	1	103	Z
DEC 5,88	DEC 4,88	800 755	1100 1700	2	4.0	2	40016	2	1	71	C
DEC 9,88	DEC 8,88	755 955	755 900	2	0.4	2	40017	2	1	526	NH
DEC 12,88	DEC 9,88	755 755	**** ****	2	0.3	2	40018	2	1	83	E NZ
DEC 14,88	DEC 13,88	755 925	1600 600	2	0.3	2	40019	2	1	31	N
DEC 15,88	DEC 14,88	925 805	1400 700	2	4.0	2	40020	2	1	87	
DEC 19,88	DEC 15,88	805 805	100 200	2	2.2	2	40021	2	1	104	Z
DEC 20,88	DEC 19,88	805 1125	1300 1000	1	2.4	2	40022	2	1	135	N
DEC 23,88	DEC 20,88	1125 845	200 845	3	8.1	2	40023	2	1	84	Z
DEC 25,88	DEC 23,88	845 1345	1600 1330	2	8.4	2	40024	2	1	115	Z
DEC 28,88	DEC 25,88	1345 904	**** ****	2	41.0	2	40025	2	1	U 28	PE Z
DEC 29,88	DEC 28,88	910 910	**** ****	2	0.2	2	40055	2	1	U 343	EF

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ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : DORSET/DAILY/AEROCHEM

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REMOVAL DATE	EXPOSURE DATE	SAMPLING START/END HR. HR.	PRECIP START/END HR. HR.	SAMPLE TYPE 01-RAIN 02-SNOW 03-COMP/04-OTHER	GAUGE DEPTH(MM)	GAUGE TYPE 01-STD. 02-NIPHER	SAMPLE NUMBER	PROJECT CODE 02-APIOS 03-SPECIAL	SUBPROJECT CODE 01-MOE 03-AES	SAMPLER EFFICI- ENCY (%)	COMMENTS FIELD OFFICE
JAN 1,88	DEC 31,87	815 815	1400 815	2	7.0	2	45907	2	1	77	
JAN 2,88	JAN 1,88	815 815	815 815	2	10.1	2	45909	2	1	50	
JAN 3,88	JAN 2,88	815 815	815 1300	2	0.8	2	45911	2	1	38	N
JAN 4,88	JAN 3,88	815 815	400 815	2	1.4	2	45913	2	1	72	
JAN 5,88	JAN 4,88	815 840	815 2400	2	10.5	2	45915	2	1	67	
JAN 9,88	JAN 8,88	800 830	300 1530	2	0.8	2	45917	2	1	89	
JAN 10,88	JAN 9,88	830 830	1400 1500	2	0.3	2	45919	2	1	93	
JAN 11,88	JAN 10,88	830 730	****	2	****	2	45921	2	1	****	X
JAN 12,88	JAN 11,88	730 730	1200 1600	2	0.4	2	45923	2	1	15	XN
JAN 13,88	JAN 12,88	730 830	2400 600	2	10.6	2	45925	2	1	91	
JAN 16,88	JAN 14,88	730 830	1800 2400	2	0.6	2	45927	2	1	7	XNY2
JAN 18,88	JAN 17,88	830 830	1800 830	3	16.3	2	45929	2	1	102	
JAN 19,88	JAN 18,88	830 730	1600 1900	2	2.2	2	45933	2	1	124	N
JAN 20,88	JAN 19,88	730 715	100 715	1	4.1	2	45935	2	1	138	N
JAN 21,88	JAN 20,88	715 815	2300 400	2	1.8	2	45937	2	1	73	
JAN 22,88	JAN 21,88	815 730	800 1000	2	****	2	45939	2	1	****	X
JAN 23,88	JAN 22,88	730 815	1900 815	2	0.4	2	45941	2	1	66	
JAN 24,88	JAN 23,88	815 845	815 1100	2	1.6	2	45943	2	1	58	
JAN 25,88	JAN 24,88	845 815	2300 200	2	7.6	2	45945	2	1	76	
JAN 28,88	JAN 27,88	800 815	2400 815	2	1.5	2	45947	2	1	75	
JAN 29,88	JAN 28,88	815 730	815 1100	2	0.4	2	45949	2	1	81	
JAN 31,88	JAN 30,88	800 815	1200 815	1	5.5	2	45951	2	1	99	
FEB 1,88	JAN 31,88	815 800	815 2400	1	13.8	2	45953	2	1	101	
FEB 2,88	FEB 1,88	800 745	2000 200	2	4.4	2	45957	2	1	22	NHM
FEB 4,88	FEB 3,88	800 815	2400 300	2	1.0	2	45959	2	1	101	
FEB 6,88	FEB 5,88	800 815	430 815	2	2.3	2	45961	2	1	52	
FEB 7,88	FEB 6,88	815 805	815 1100	2	1.5	2	45963	2	1	27	N
FEB 8,88	FEB 7,88	805 825	1200 300	2	2.8	2	45965	2	1	47	N
FEB 9,88	FEB 8,88	825 830	400 830	2	0.8	2	45967	2	1	35	N
FEB 10,88	FEB 9,88	830 800	2400 500	2	0.7	2	45969	2	1	35	N
FEB 12,88	FEB 11,88	800 830	2000 830	2	14.8	2	45971	2	1	50	
FEB 13,88	FEB 12,88	830 800	830 700	2	10.5	2	45973	2	1	62	
FEB 15,88	FEB 14,88	800 830	2200 830	3	13.0	2	45975	2	1	89	
FEB 16,88	FEB 15,88	830 830	830 1500	3	6.5	2	45977	2	1	96	
FEB 17,88	FEB 16,88	830 800	2200 800	3	2.0	2	45979	2	1	87	
FEB 18,88	FEB 17,88	800 800	1500 1800	2	0.8	2	45981	2	1	62	
FEB 20,88	FEB 19,88	800 800	1830 630	2	13.0	2	45983	2	1	79	
FEB 21,88	FEB 20,88	800 830	1900 400	2	5.7	2	45985	2	1	80	
FEB 22,88	FEB 21,88	830 800	2300 800	2	1.3	2	45987	2	1	67	H
FEB 23,88	FEB 22,88	800 800	830 1800	3	13.8	2	45989	2	1	85	JHM

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : DORSET/DAILY/AEROCHEM

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REMOVAL DATE	EXPOSURE DATE	VOLUME ML	CONDUCT. UMHO/CM	PH FIELD	PH LAB	TOTAL H+ TO PH0.3 MG/L	TOTAL H+ GRAN MG/L	SULPHATE MG/L	NITRATE AS N MG/L
JAN 1,88	DEC 31,87	346.0	21.0	4.44	4.52	*****	0.0552	2.40	0.50
JAN 2,88	JAN 1,88	324.0	6.5	4.83	4.93	*****	0.0283	0.55	0.18
JAN 3,88	JAN 2,88	20.0	4.0	*****	5.30	*****	0.0240	LG 0.20	0.17
JAN 4,88	JAN 3,88	65.0	35.5	*****	4.21	*****	0.0917	0.55	1.37
JAN 5,88	JAN 4,88	453.0	6.5	4.78	4.98	*****	0.0304	0.25	0.27
JAN 9,88	JAN 8,88	46.0	40.5	*****	4.08	*****	0.1070	0.35	1.44
JAN 10,88	JAN 9,88	18.0	10.5	*****	4.71	*****	0.0389	0.30	0.36
JAN 11,88	JAN 10,88	1.0	*****	*****	*****	*****	*****	*****	*****
JAN 12,88	JAN 11,88	4.0	*****	*****	*****	*****	*****	*****	*****
JAN 13,88	JAN 12,88	619.0	33.5	4.24	4.24	*****	0.0916	3.00	0.90
JAN 16,88	JAN 14,88	3.0	*****	*****	*****	*****	*****	*****	*****
JAN 18,88	JAN 17,88	1071.0	17.5	4.44	4.41	*****	0.0594	1.05	0.39
JAN 19,88	JAN 18,88	176.0	41.5	4.06	4.01	*****	0.1200	2.20	0.95
JAN 20,88	JAN 19,88	363.0	21.5	4.45	4.45	*****	0.0556	1.65	0.29
JAN 21,88	JAN 20,88	85.0	47.5	*****	3.99	*****	0.1240	3.35	0.92
JAN 22,88	JAN 21,88	4.0	*****	*****	*****	*****	*****	*****	*****
JAN 23,88	JAN 22,88	17.0	35.0	*****	4.37	*****	0.0748	1.30	1.00
JAN 24,88	JAN 23,88	60.0	39.0	*****	4.17	*****	0.1070	1.25	1.20
JAN 25,88	JAN 24,88	375.0	37.0	4.14	4.16	*****	0.1050	2.25	0.82
JAN 28,88	JAN 27,88	73.0	28.5	*****	4.26	*****	0.0834	0.30	1.11
JAN 29,88	JAN 28,88	21.0	7.0	*****	UG 5.54	*****	0.0262	0.35	0.26
JAN 31,88	JAN 30,88	350.0	68.5	3.95	4.04	*****	0.1430	6.80	1.86
FEB 1,88	JAN 31,88	896.0	23.0	4.32	4.42	*****	0.0684	2.35	0.32
FEB 2,88	FEB 1,88	64.0	7.0	*****	5.15	*****	0.0316	0.55	0.20
FEB 4,88	FEB 3,88	65.0	23.5	*****	4.31	*****	0.0753	LG 0.05	0.74
FEB 6,88	FEB 5,88	77.0	5.0	*****	<=> 5.00	*****	0.0265	0.30	0.20
FEB 7,88	FEB 6,88	26.0	8.0	*****	UG 6.82	*****	0.0160	!IS *****	!IS *****
FEB 8,88	FEB 7,88	85.0	26.5	*****	4.25	*****	0.0849	0.55	1.04
FEB 9,88	FEB 8,88	18.0	16.0	*****	5.34	*****	0.0256	!IS *****	!IS *****
FEB 10,88	FEB 9,88	16.0	9.5	*****	4.85	*****	0.0380	LG 0.15	0.42
FEB 12,88	FEB 11,88	481.0	25.0	4.32	4.26	*****	0.0822	LG 0.20	0.82
FEB 13,88	FEB 12,88	424.0	33.0	4.21	4.15	*****	0.1020	1.10	0.98
FEB 15,88	FEB 14,88	746.0	37.0	4.13	4.15	*****	0.1050	2.20	0.82
FEB 16,88	FEB 15,88	404.0	23.0	4.33	4.35	*****	0.0757	1.90	0.34
FEB 17,88	FEB 16,88	112.0	34.5	4.18	4.22	*****	0.0923	1.75	0.98
FEB 18,88	FEB 17,88	32.0	60.5	*****	4.08	*****	0.1340	4.55	1.65
FEB 20,88	FEB 19,88	663.0	21.0	4.30	4.38	*****	0.0713	0.60	0.68
FEB 21,88	FEB 20,88	294.0	49.0	4.06	4.08	*****	0.1470	3.00	1.47
FEB 22,88	FEB 21,88	56.0	19.0	*****	4.78	*****	0.0452	1.30	0.86
FEB 23,88	FEB 22,88	758.0	22.5	UG 5.90	UG 7.06	*****	0.0202	3.45	1.10

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : DORSET/DAILY/AEROCHEM

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REMOVAL DATE	EXPOSURE DATE	CALCIUM MG/L	CHLORIDE MG/L	MAGNESIUM MG/L	POTASSIUM MG/L	SODIUM MG/L	AMMONIUM AS N MG/L	FREE H+ LAB MG/L
JAN 1,88	DEC 31,87	0.22	0.17	0.030	<T 0.015	0.075	0.555	0.0302
JAN 2,88	JAN 1,88	<T 0.08	0.07	<T 0.005	<W 0.005	0.035	0.080	0.0117
JAN 3,88	JAN 2,88	!IS *****	0.33	!IS *****	!IS *****	!IS *****	<W 0.005	0.0050
JAN 4,88	JAN 3,88	0.52	0.48	0.080	<T 0.010	0.220	0.045	0.0617
JAN 5,88	JAN 4,88	0.12	0.11	<T 0.010	D 0.030	0.040	0.040	0.0105
JAN 9,88	JAN 8,88	0.20	0.22	<T 0.015	<T 0.010	0.100	0.055	0.0832
JAN 10,88	JAN 9,88	!IS *****	0.49	!IS *****	!IS *****	!IS *****	<T 0.005	0.0195
JAN 11,88	JAN 10,88	*****	*****	*****	*****	*****	*****	*****
JAN 12,88	JAN 11,88	*****	*****	*****	*****	*****	*****	*****
JAN 13,88	JAN 12,88	0.18	0.20	<T 0.020	0.050	0.075	0.900	0.0575
JAN 16,88	JAN 14,88	*****	*****	*****	*****	*****	*****	*****
JAN 18,88	JAN 17,88	<T 0.02	0.11	<T 0.005	<T 0.015	0.045	0.115	0.0389
JAN 19,88	JAN 18,88	<T 0.06	0.17	<T 0.010	<T 0.015	0.075	0.215	0.0977
JAN 20,88	JAN 19,88	0.22	0.13	<T 0.010	<T 0.020	0.080	0.085	0.0355
JAN 21,88	JAN 20,88	0.30	0.44	<T 0.020	0.055	0.290	0.325	0.1023
JAN 22,88	JAN 21,88	*****	*****	*****	*****	*****	*****	*****
JAN 23,88	JAN 22,88	!IS *****	UG 2.79	!IS *****	!IS *****	!IS *****	0.150	0.0427
JAN 24,88	JAN 23,88	0.23	0.60	0.040	D 0.050	0.275	0.160	0.0676
JAN 25,88	JAN 24,88	<T 0.04	0.44	<T 0.010	<T 0.010	0.155	0.360	0.0692
JAN 28,88	JAN 27,88	0.32	0.38	0.050	<T 0.005	0.230	<T 0.010	0.0550
JAN 29,88	JAN 28,88	!IS *****	0.33	!IS *****	!IS *****	!IS *****	<T 0.010	UG 0.0029
JAN 31,88	JAN 30,88	0.98	1.04	0.125	0.115	UG 0.635	1.560	0.0912
FEB 1,88	JAN 31,88	<T 0.08	0.29	0.035	<T 0.010	0.175	0.330	0.0380
FEB 2,88	FEB 1,88	<T 0.02	0.19	<T 0.010	0.075	0.120	0.110	0.0071
FEB 4,88	FEB 3,88	<T 0.06	0.38	<T 0.010	<T 0.005	0.170	<T 0.010	0.0490
FEB 6,88	FEB 5,88	<T 0.04	0.11	<T 0.010	<T 0.015	0.075	0.030	<=> 0.0100
FEB 7,88	FEB 6,88	<W 0.02	!IS *****	<W 0.005	<W 0.005	0.095	0.030	UG 0.0002
FEB 8,88	FEB 7,88	0.18	0.18	0.035	<T 0.010	0.070	0.120	0.0562
FEB 9,88	FEB 8,88	<T 0.06	!IS *****	<T 0.015	<T 0.010	0.250	0.040	0.0046
FEB 10,88	FEB 9,88	!IS *****	0.22	!IS *****	!IS *****	!IS *****	0.040	0.0141
FEB 12,88	FEB 11,88	<T 0.02	0.12	<T 0.010	<W 0.005	0.045	<T 0.020	0.0550
FEB 13,88	FEB 12,88	<W 0.02	0.21	0.035	<T 0.020	0.085	0.090	0.0708
FEB 15,88	FEB 14,88	<T 0.08	0.23	<T 0.015	0.045	0.110	0.280	0.0708
FEB 16,88	FEB 15,88	<W 0.02	<T 0.03	<W 0.005	<W 0.005	<T 0.005	0.220	0.0447
FEB 17,88	FEB 16,88	0.14	0.23	0.030	<T 0.020	0.110	0.420	0.0603
FEB 18,88	FEB 17,88	0.26	UG 1.48	0.050	0.160	UG 0.935	1.260	0.0832
FEB 20,88	FEB 19,88	<T 0.04	0.11	<W 0.005	<T 0.005	0.080	0.070	0.0417
FEB 21,88	FEB 20,88	<T 0.08	0.27	<T 0.010	0.030	0.075	0.930	0.0832
FEB 22,88	FEB 21,88	0.68	0.72	0.125	<T 0.010	0.445	0.230	0.0166
FEB 23,88	FEB 22,88	1.14	0.59	0.180	0.090	0.440	1.110	UG 0.0001

ONTARIO MINISTRY OF THE ENVIRONMENT
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REMOVAL DATE	EXPOSURE DATE	SAMPLING START/END HR. HR.	PRECIP START/END HR. HR.	SAMPLE TYPE 01-RAIN 02-SNOW 03-COMP/04-OTHER	GAUGE DEPTH(MM)	GAUGE TYPE 01-STD. 02-NIPHER	SAMPLE NUMBER	PROJECT CODE 02-APIOS 03-SPECIAL	SUBPROJECT CODE 01-MOE 03-AES	SAMPLER EFFICI- ENCY (%)	COMMENTS FIELD OFFICE
FEB 24,88	FEB 23,88	800 740	1700 2100	2	0.6	2	45991	2	1	122	N
FEB 25,88	FEB 24,88	740 800	1300 1900	2	4.0	2	45993	2	1	86	H
FEB 26,88	FEB 25,88	800 730	1200 1400	2	0.5	2	45995	2	1	102	HM
FEB 27,88	FEB 26,88	730 730	1200 2300	2	1.4	2	45997	2	1	62	
FEB 29,88	FEB 28,88	830 800	2100 800	2	4.2	2	45999	2	1	78	
MAR 2,88	MAR 1,88	830 800	200 800	2	1.2	2	76502	2	1	88	
MAR 3,88	MAR 2,88	800 830	800 900	2	0.5	2	76504	2	1	124	N
MAR 9,88	MAR 8,88	800 750	300 750	1	6.5	2	76509	2	1	102	
MAR 10,88	MAR 9,88	750 750	750 1100	1	1.5	2	76511	2	1	202	N
MAR 12,88	MAR 11,88	750 750	100 300	2	****	W	76515	2	1	****	X
MAR 13,88	MAR 12,88	750 750	1500 750	3	8.0	2	76517	2	1	82	
MAR 14,88	MAR 13,88	750 750	750 500	2	4.2	2	76519	2	1	83	
MAR 15,88	MAR 14,88	750 750	200 600	2	****	2	76521	2	1	****	X
MAR 19,88	MAR 18,88	800 800	2230 300	2	1.6	2	76523	2	1	106	
MAR 20,88	MAR 19,88	800 800	1600 1800	2	0.2	2	76525	2	1	109	C
MAR 25,88	MAR 24,88	800 700	2400 130	1	2.2	1	76527	2	1	101	
MAR 26,88	MAR 25,88	700 800	1030 1100	1	8.8	1	76529	2	1	96	
MAR 27,88	MAR 26,88	800 800	1630 2200	1	11.9	1	76531	2	1	98	
MAR 28,88	MAR 27,88	800 800	600 1800	2	0.3	2	76533	2	1	166	N
MAR 29,88	MAR 28,88	800 800	100 615	1	0.6	1	76535	2	1	137	N
MAR 30,88	MAR 29,88	800 730	1930 2230	1	****	W	76537	2	1	****	
MAR 31,88	MAR 30,88	730 715	900 1000	1	1.8	1	76539	2	1	85	J
APR 3,88	APR 2,88	800 800	500 800	1	10.2	1	76541	2	1	114	
APR 4,88	APR 3,88	800 800	800 900	1	11.0	1	76543	2	1	90	J
APR 5,88	APR 4,88	800 800	1200 1300	1	1.3	1	76545	2	1	46	N
APR 7,88	APR 6,88	800 800	300 800	1	2.0	1	76547	2	1	95	C
APR 8,88	APR 7,88	800 800	1600 2400	1	9.0	1	76549	2	1	88	
APR 13,88	APR 12,88	800 715	100 400	1	2.5	1	76551	2	1	97	JHM
APR 14,88	APR 13,88	715 800	500 800	1	4.1	1	76553	2	1	113	
APR 15,88	APR 14,88	800 710	800 1300	1	10.4	1	76555	2	1	87	
APR 16,88	APR 15,88	710 815	1700 2300	2	3.0	2	76557	2	1	59	C
APR 18,88	APR 17,88	800 805	1730 2300	3	3.6	1	76559	2	1	83	
APR 19,88	APR 18,88	805 800	500 800	2	1.2	2	76561	2	1	80	
APR 20,88	APR 19,88	800 700	800 1200	2	0.2	2	76563	2	1	62	
APR 21,88	APR 20,88	700 800	1900 2200	2	7.2	2	76565	2	1	94	JH
APR 22,88	APR 21,88	800 845	300 845	2	3.0	2	75371	2	1	57	HCM
APR 24,88	APR 23,88	830 900	2100 2400	3	18.0	1	76567	2	1	93	
APR 25,88	APR 24,88	900 700	930 1030	1	0.6	1	76571	2	1	54	HCM
APR 26,88	APR 25,88	700 800	500 730	1	5.3	1	76573	2	1	95	
APR 28,88	APR 27,88	800 800	2230 400	1	6.4	1	76575	2	1	94	

ONTARIO MINISTRY OF THE ENVIRONMENT
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REMOVAL DATE	EXPOSURE DATE	VOLUME ML	CONDUCT. UMHO/CM	PH FIELD	PH LAB	TOTAL H+ TO PH8.3 MG/L	TOTAL H+ GRAN MG/L	SULPHATE MG/L	NITRATE AS N MG/L
FEB 24,88	FEB 23,88	47.0	41.5	*****	5.32	*****	0.0262	0.75	0.25
FEB 25,88	FEB 24,88	222.0	8.0	4.91	5.35	*****	0.0279	0.80	0.24
FEB 26,88	FEB 25,88	33.0	6.5	*****	5.34	*****	0.0266	0.65	0.11
FEB 27,88	FEB 26,88	56.0	28.0	*****	4.39	*****	0.0777	1.10	1.04
FEB 29,88	FEB 28,88	212.0	26.5	4.23	4.21	*****	0.0863	0.85	1.05
MAR 2,88	MAR 1,88	68.0	47.5	*****	4.46	*****	0.0730	5.00	2.44
MAR 3,88	MAR 2,88	40.0	> 100.0	*****	!IS *****	*****	!IS *****	UG 11.60	UG 3.58
MAR 9,88	MAR 8,88	425.0	92.0	3.86	3.75	*****	0.2200	8.20	1.94
MAR 10,88	MAR 9,88	195.0	36.0	4.39	4.40	*****	0.0669	3.85	1.08
MAR 12,88	MAR 11,88	4.0	*****	*****	*****	*****	*****	*****	*****
MAR 13,88	MAR 12,88	422.0	31.5	4.30	4.25	*****	0.0818	2.60	0.64
MAR 14,88	MAR 13,88	226.0	26.5	4.38	4.33	*****	0.0692	1.65	0.69
MAR 15,88	MAR 14,88	2.0	*****	*****	*****	*****	*****	*****	*****
MAR 19,88	MAR 18,88	109.0	33.0	4.30	4.21	*****	0.0841	1.65	1.00
MAR 20,88	MAR 19,88	14.0	LG 3.5	*****	UG 6.02	*****	0.0172	<T 0.15	LG 0.06
MAR 25,88	MAR 24,88	143.0	43.0	4.02	4.05	*****	0.1270	4.85	0.77
MAR 26,88	MAR 25,88	547.0	28.5	4.30	4.40	*****	0.0708	3.05	0.47
MAR 27,88	MAR 26,88	753.0	27.5	4.46	4.51	*****	0.0630	2.50	0.80
MAR 28,88	MAR 27,88	32.0	7.0	*****	4.97	*****	0.0316	1.10	LG 0.09
MAR 29,88	MAR 28,88	53.0	27.5	*****	4.42	*****	0.0647	3.05	0.63
MAR 30,88	MAR 29,88	24.0	> 100.0	*****	3.64	*****	UG 0.2920	UG 15.70	1.90
MAR 31,88	MAR 30,88	99.0	43.5	D 4.60	4.23	*****	0.0958	5.45	0.75
APR 3,88	APR 2,88	750.0	35.5	4.11	4.17	*****	0.0957	2.95	0.46
APR 4,88	APR 3,88	640.0	11.0	4.12	4.79	*****	0.0358	1.05	0.11
APR 5,88	APR 4,88	39.0	24.5	*****	4.50	*****	0.0588	2.40	0.54
APR 7,88	APR 6,88	123.0	> 100.0	LG 3.41	LG 3.37	*****	UG 0.5220	UG 17.30	UG 4.20
APR 8,88	APR 7,88	512.0	59.0	3.91	3.91	*****	0.1570	5.05	0.94
APR 13,88	APR 12,88	157.0	17.5	UG 5.11	UG 7.42	*****	0.0165	2.30	0.75
APR 14,88	APR 13,88	298.0	62.0	3.94	3.98	*****	0.1440	4.85	1.46
APR 15,88	APR 14,88	581.0	45.0	4.07	4.10	*****	0.1090	4.10	0.92
APR 16,88	APR 15,88	114.0	19.5	4.56	4.59	*****	0.0432	1.50	LG 0.08
APR 18,88	APR 17,88	192.0	19.0	UG 6.51	UG 7.13	*****	0.0152	1.95	0.63
APR 19,88	APR 18,88	62.0	7.0	*****	4.99	*****	0.0263	0.95	LG 0.06
APR 20,88	APR 19,88	8.0	LG 3.0	*****	UG 5.62	*****	0.0176	0.25	<W 0.01
APR 21,88	APR 20,88	434.0	13.5	UG 5.05	UG 6.15	*****	0.0201	1.60	0.69
APR 22,88	APR 21,88	110.0	6.5	*****	UG 6.88	*****	0.0152	0.55	LG 0.08
APR 24,88	APR 23,88	1077.0	32.0	4.22	4.23	*****	0.0865	2.85	0.56
APR 25,88	APR 24,88	21.0	LG 2.5	*****	UG 5.57	*****	0.0192	<T 0.05	<T 0.02
APR 26,88	APR 25,88	323.0	21.5	4.48	4.58	*****	0.0526	1.85	0.81
APR 28,88	APR 27,88	388.0	33.0	4.18	4.15	*****	0.0980	1.90	0.80

ONTARIO MINISTRY OF THE ENVIRONMENT
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REMOVAL DATE	EXPOSURE DATE	CALCIUM MG/L	CHLORIDE MG/L	MAGNESIUM MG/L	POTASSIUM MG/L	SODIUM MG/L	AMMONIUM AS N MG/L	FREE H+ LAB MG/L
FEB 24,88	FEB 23,88	!IS *****	UG 10.86	!IS *****	!IS *****	!IS *****	0.030	0.0048
FEB 25,88	FEB 24,88	0.24	0.57	0.040	0.035	0.365	0.120	0.0045
FEB 26,88	FEB 25,88	<T 0.08	0.55	<T 0.015	<T 0.010	0.370	0.040	0.0046
FEB 27,88	FEB 26,88	0.56	0.85	0.055	<T 0.015	0.445	0.280	0.0407
FEB 29,88	FEB 28,88	0.18	0.33	<T 0.020	<T 0.015	0.165	0.310	0.0617
MAR 2,88	MAR 1,88	1.72	0.50	0.140	0.060	0.165	2.150	0.0347
MAR 3,88	MAR 2,88	1.84	UG 1.37	0.210	0.135	UG 0.625	!IR *****	!IS *****
MAR 9,88	MAR 8,88	1.08	0.52	0.140	0.085	0.230	1.240	0.1778
MAR 10,88	MAR 9,88	0.50	0.26	0.050	0.070	0.130	1.240	0.0398
MAR 12,88	MAR 11,88	*****	*****	*****	*****	*****	*****	*****
MAR 13,88	MAR 12,88	0.28	0.13	0.030	0.030	0.065	0.360	0.0562
MAR 14,88	MAR 13,88	0.12	0.08	<T 0.010	<T 0.015	0.040	0.480	0.0468
MAR 15,88	MAR 14,88	*****	*****	*****	*****	*****	*****	*****
MAR 19,88	MAR 18,88	0.14	0.26	<T 0.020	<T 0.015	0.065	0.580	0.0617
MAR 20,88	MAR 19,88	<W 0.02	0.12	<W 0.005	<T 0.005	0.080	0.120	UG 0.0010
MAR 25,88	MAR 24,88	0.48	0.31	0.070	0.045	0.150	0.480	0.0891
MAR 26,88	MAR 25,88	0.38	0.28	0.050	0.045	0.250	0.300	0.0398
MAR 27,88	MAR 26,88	0.50	0.12	0.060	0.040	0.030	0.670	0.0309
MAR 28,88	MAR 27,88	!IS *****	<T 0.03	!IS *****	!IS *****	!IS *****	0.120	0.0107
MAR 29,88	MAR 28,88	0.68	0.23	0.060	0.045	0.155	0.370	0.0380
MAR 30,88	MAR 29,88	!IS *****	0.90	!IS *****	!IS *****	!IS *****	0.980	0.2291
MAR 31,88	MAR 30,88	1.20	0.36	0.135	0.075	0.255	0.380	0.0589
APR 3,88	APR 2,88	0.14	0.24	<T 0.025	0.045	0.130	0.250	0.0676
APR 4,88	APR 3,88	<T 0.04	<T 0.02	<T 0.005	<T 0.020	0.030	0.060	0.0162
APR 5,88	APR 4,88	0.20	0.21	0.025	0.055	0.130	0.500	0.0316
APR 7,88	APR 6,88	2.22	0.89	0.230	UG 0.255	0.410	1.370	LG 0.4266
APR 8,88	APR 7,88	0.18	0.14	<T 0.020	0.040	0.050	0.520	0.1230
APR 13,88	APR 12,88	1.00	0.21	0.100	0.070	0.115	0.680	UG 0.0000
APR 14,88	APR 13,88	0.72	0.35	0.090	0.075	0.115	0.830	0.1047
APR 15,88	APR 14,88	0.18	0.17	0.040	0.030	0.040	0.840	0.0794
APR 16,88	APR 15,88	0.12	<T 0.04	<T 0.005	<W 0.005	0.035	0.040	0.0257
APR 18,88	APR 17,88	1.24	0.18	0.230	0.110	0.070	0.610	UG 0.0001
APR 19,88	APR 18,88	!IR *****	<T 0.03	!IR *****	<W 0.005	0.040	0.050	0.0102
APR 20,88	APR 19,88	<T 0.04	0.10	<T 0.005	0.040	0.045	!IS *****	UG 0.0024
APR 21,88	APR 20,88	0.52	0.12	0.095	0.030	0.050	0.620	UG 0.0007
APR 22,88	APR 21,88	0.26	<T 0.02	0.025	<T 0.005	0.035	0.080	UG 0.0001
APR 24,88	APR 23,88	<T 0.06	0.08	<T 0.010	0.085	0.035	0.420	0.0589
APR 25,88	APR 24,88	<T 0.02	<T 0.04	<W 0.005	0.040	0.035	<T 0.020	UG 0.0027
APR 26,88	APR 25,88	0.30	0.08	0.065	0.025	0.025	0.640	0.0263
APR 28,88	APR 27,88	0.20	0.12	0.030	<T 0.020	0.030	0.250	0.0708

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REMOVAL DATE	EXPOSURE DATE	SAMPLING START/END HR. HR.	PRECIP START/END HR. HR.	SAMPLE TYPE 01-RAIN 02-SNOW 03-COMP/04-OTHER	GAUGE DEPTH(MM)	GAUGE TYPE 01-STD. 02-NIPHER	SAMPLE NUMBER	PROJECT CODE 02-APIOS 03-SPECIAL	SUBPROJECT CODE 01-MOE 03-AES	SAMPLER EFFICI- ENCY (%)	COMMENTS FIELD OFFICE
APR 29,88	APR 28,88	800 700	1630 1900	1	0.7	1	76577	2	1	26	N
APR 30,88	APR 29,88	700 815	700 1600	1	1.4	1	76579	2	1	62	
MAY 9,88	MAY 8,88	810 800	200 730	1	0.2	1	76584	2	1	78	
MAY 10,88	MAY 9,88	800 800	2200 700	1	5.2	1	76586	2	1	100	
MAY 11,88	MAY 10,88	800 800	1000 1300	1	1.6	1	76588	2	1	77	
MAY 12,88	MAY 11,88	800 800	730 800	1	****	1	76590	2	1	****	E
MAY 13,88	MAY 12,88	800 700	500 600	1	2.0	1	76592	2	1	93	
MAY 14,88	MAY 13,88	700 830	700 930	1	6.6	1	76594	2	1	93	B
MAY 16,88	MAY 15,88	820 800	2100 100	1	28.0	1	76596	2	1	101	
MAY 17,88	MAY 16,88	800 800	1600 1700	1	0.4	1	76600	2	1	62	
MAY 20,88	MAY 19,88	800 700	1900 500	1	2.6	1	76602	2	1	98	HM
MAY 21,88	MAY 20,88	700 820	1000 1900	1	10.3	1	76604	2	1	99	CM
MAY 22,88	MAY 21,88	820 800	****	1	4.5	1	76606	2	1	113	BC
MAY 27,88	MAY 26,88	800 700	1600 1900	1	****	1	76608	2	1	****	Q
JUN 2,88	JUN 1,88	750 800	930 1100	1	1.0	1	76610	2	1	62	U JB H
JUN 3,88	JUN 2,88	800 700	1600 2200	1	0.2	1	76612	2	1	23	B N
JUN 7,88	JUN 6,88	800 800	1600 1900	1	****	1	76614	2	1	****	B X
JUN 22,88	JUN 21,88	800 800	500 800	1	6.6	1	76616	2	1	101	
JUN 23,88	JUN 22,88	800 715	800 1200	1	9.2	1	76618	2	1	98	
JUN 25,88	JUN 24,88	755 820	****	1	0.3	1	76620	2	1	83	
JUN 26,88	JUN 25,88	820 815	930 1000	1	6.8	1	76622	2	1	92	
JUN 27,88	JUN 26,88	815 700	830 900	1	0.4	1	76624	2	1	3	E N
JUN 28,88	JUN 27,88	700 800	700 730	1	****	1	76626	2	1	****	C X
JUN 29,88	JUN 28,88	800 730	1030 1230	1	5.0	1	76628	2	1	102	B M
JUN 30,88	JUN 29,88	730 710	2100 2300	1	1.8	1	76630	2	1	81	
JUL 1,88	JUN 30,88	710 800	730 800	1	0.5	1	76632	2	1	43	N
JUL 2,88	JUL 1,88	800 730	1400 1430	1	0.2	1	76634	2	1	124	C
JUL 11,88	JUL 10,88	800 800	330 500	1	13.0	1	76636	2	1	104	
JUL 12,88	JUL 11,88	800 800	200 230	1	0.5	1	76640	2	1	43	
JUL 14,88	JUL 13,88	800 800	330 730	1	15.4	1	76642	2	1	100	
JUL 16,88	JUL 15,88	800 800	330 430	1	0.5	1	76644	2	1	31	
JUL 19,88	JUL 18,88	800 800	****	1	****	1	76646	2	1	****	
JUL 21,88	JUL 20,88	800 700	1830 1930	1	****	1	76648	2	1	****	
JUL 23,88	JUL 22,88	710 710	1245 1430	1	21.8	1	76650	2	1	103	
JUL 24,88	JUL 23,88	710 710	300 500	1	****	1	76652	2	1	****	X
JUL 25,88	JUL 24,88	710 800	830 1230	1	7.2	1	76654	2	1	123	N
JUL 26,88	JUL 25,88	800 800	130 630	1	1.0	1	76656	2	1	96	
JUL 27,88	JUL 26,88	800 800	1700 1900	1	****	1	76658	2	1	****	X
JUL 28,88	JUL 27,88	800 800	1300 1400	1	0.2	1	76660	2	1	62	N
JUL 31,88	JUL 30,88	715 800	1200 1330	1	0.3	1	76662	2	1	114	

ONTARIO MINISTRY OF THE ENVIRONMENT
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REMOVAL DATE	EXPOSURE DATE	VOLUME ML	CONDUCT. UMHO/CM	PH FIELD	PH LAB	TOTAL H+ TO PH8.3 MG/L	TOTAL H+ GRAN MG/L	SULPHATE MG/L	NITRATE AS N MG/L
APR 29,88	APR 28,88	12.0	8.0	*****	UCR 4.95	*****	UCR 0.0330	0.35	0.20
APR 30,88	APR 29,88	56.0	22.5	*****	UCR 4.46	*****	UCR 0.0639	2.40	0.20
MAY 9,88	MAY 8,88	10.0	64.0	*****	UCR 3.99	*****	UCR 0.1510	6.75	0.92
MAY 10,88	MAY 9,88	334.0	65.5	3.90	3.96	*****	0.1580	8.30	1.03
MAY 11,88	MAY 10,88	79.0	15.5	*****	4.80	*****	0.0367	1.55	0.38
MAY 12,88	MAY 11,88	1.0	*****	*****	*****	*****	*****	*****	*****
MAY 13,88	MAY 12,88	120.0	43.0	4.28	4.55	*****	0.0701	6.00	1.69
MAY 14,88	MAY 13,88	396.0	13.5	4.60	4.80	*****	0.0365	1.95	0.27
MAY 16,88	MAY 15,88	1813.0	23.0	4.31	4.41	*****	0.0595	2.75	0.43
MAY 17,88	MAY 16,88	16.0	24.0	*****	4.41	*****	0.0639	3.20	0.33
MAY 20,88	MAY 19,88	164.0	7.0	4.80	5.01	*****	0.0290	0.70	0.19
MAY 21,88	MAY 20,88	655.0	LG 3.0	5.11	5.41	*****	0.0214	<W 0.05	0.08
MAY 22,88	MAY 21,88	326.0	48.5	*****	4.00	*****	0.1340	3.50	0.82
MAY 27,88	MAY 26,88	2.0	*****	*****	*****	*****	*****	*****	*****
JUN 2,88	JUN 1,88	40.0	43.0	*****	4.91	*****	0.0601	7.95	0.86
JUN 3,88	JUN 2,88	3.0	*****	*****	*****	*****	*****	*****	*****
JUN 7,88	JUN 6,88	2.0	*****	*****	*****	*****	*****	*****	*****
JUN 22,88	JUN 21,88	430.0	32.0	4.16	4.45	*****	0.0689	4.00	0.74
JUN 23,88	JUN 22,88	583.0	12.5	4.42	4.72	*****	0.0404	1.20	0.22
JUN 25,88	JUN 24,88	16.0	39.5	*****	4.29	*****	0.0809	5.60	0.58
JUN 26,88	JUN 25,88	404.0	33.5	4.10	4.27	*****	0.0780	3.30	0.55
JUN 27,88	JUN 26,88	1.0	*****	*****	*****	*****	*****	*****	*****
JUN 28,88	JUN 27,88	4.0	*****	*****	*****	*****	*****	*****	*****
JUN 29,88	JUN 28,88	327.0	8.5	4.49	4.76	*****	0.0359	0.75	<T 0.03
JUN 30,88	JUN 29,88	94.0	4.0	*****	5.18	*****	0.0288	0.50	<T 0.02
JUL 1,88	JUN 30,88	14.0	12.0	*****	4.69	*****	0.0378	1.50	<W 0.01
JUL 2,88	JUL 1,88	16.0	LG 2.5	*****	5.78	*****	0.2380	LG 0.25	<W 0.01
JUL 11,88	JUL 10,88	868.0	14.0	4.41	4.62	*****	0.0435	1.45	0.18
JUL 12,88	JUL 11,88	14.0	7.0	*****	4.98	*****	0.0276	0.45	0.12
JUL 14,88	JUL 13,88	990.0	34.0	4.21	4.31	*****	0.0741	4.15	0.54
JUL 16,88	JUL 15,88	10.0	22.5	*****	4.42	*****	0.0590	2.25	0.47
JUL 19,88	JUL 18,88	9.0	12.5	*****	5.21	*****	0.0242	1.30	0.49
JUL 21,88	JUL 20,88	20.0	21.0	*****	4.55	*****	0.0521	3.35	0.20
JUL 23,88	JUL 22,88	1452.0	9.5	4.44	4.80	*****	0.0354	0.80	0.14
JUL 24,88	JUL 23,88	6.0	*****	*****	*****	*****	*****	*****	*****
JUL 25,88	JUL 24,88	572.0	7.5	4.55	4.80	*****	0.0302	0.60	0.14
JUL 26,88	JUL 25,88	62.0	52.0	*****	4.00	*****	0.1270	4.85	1.07
JUL 27,88	JUL 26,88	4.0	*****	*****	*****	*****	*****	*****	*****
JUL 28,88	JUL 27,88	8.0	6.0	*****	5.08	*****	0.0207	0.40	0.11
JUL 31,88	JUL 30,88	22.0	!IS *****	*****	4.12	*****	0.1010	!IS *****	!IS *****

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ONTARIO MINISTRY OF THE ENVIRONMENT
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REMOVAL DATE	EXPOSURE DATE	SAMPLING START/END HR. HR.	PRECIP START/END HR. HR.	SAMPLE TYPE 01-RAIN 02-SNOW 03-COMP/04-OTHER	GAUGE DEPTH(MM)	GAUGE TYPE 01-STD. 02-NIPHER	SAMPLE NUMBER	PROJECT CODE 02-APIOS 03-SPECIAL	SUBPROJECT CODE 01-MOE 03-AES	SAMPLER EFFICI- ENCY (%)	COMMENTS FIELD OFFICE
OCT 6,88	OCT 5,88	800 800	800 1100	1	2.9	1	76754	2	1	60	
OCT 8,88	OCT 7,88	800 815	1200 1800	1	1.2	1	76755	2	1	57	N
OCT 11,88	OCT 10,88	800 800	1230 130	1	10.0	1	76757	2	1	101	C
OCT 12,88	OCT 11,88	800 800	1130 1700	3	3.4	1	76759	2	1	61	C
OCT 13,88	OCT 12,88	800 800	830 2430	3	****	1	76761	2	1	****	
OCT 17,88	OCT 16,88	800 800	645 700	1	1.3	1	76763	2	1	93	
OCT 18,88	OCT 17,88	800 800	2045 730	1	32.4	1	76765	2	1	99	NHM
OCT 19,88	OCT 18,88	800 800	820 900	1	0.6	1	76767	2	1	23	
OCT 22,88	OCT 21,88	800 800	1700 400	1	4.7	1	76771	2	1	99	
OCT 23,88	OCT 22,88	800 800	800 1100	1	1.5	1	76773	2	1	60	
OCT 24,88	OCT 23,88	800 800	2130 400	1	3.0	1	76775	2	1	100	
OCT 25,88	OCT 24,88	800 800	1700 200	1	6.6	1	76777	2	1	105	
OCT 26,88	OCT 25,88	800 800	800 1530	1	7.4	1	76779	2	1	53	
OCT 27,88	OCT 26,88	800 800	2330 700	3	8.6	1	76781	2	1	107	
OCT 28,88	OCT 27,88	800 800	**** 800	1	8.4	1	76783	2	1	109	
OCT 29,88	OCT 28,88	800 800	830 30	3	8.4	2	76785	2	1	110	
OCT 30,88	OCT 29,88	800 800	800 1300	2	1.0	2	76787	2	1	102	
NOV 2,88	NOV 1,88	800 800	1500 1510	1	0.2	1	76789	2	1	62	N
NOV 4,88	NOV 3,88	800 800	500 630	1	2.6	2	76791	2	1	106	
NOV 5,88	NOV 4,88	800 800	2030 2200	1	3.8	1	76793	2	1	102	
NOV 6,88	NOV 5,88	800 800	1600 2100	1	20.2	1	76795	2	1	101	N
NOV 7,88	NOV 6,88	800 800	1800 2130	1	2.4	1	76797	2	1	87	
NOV 8,88	NOV 7,88	800 800	200 730	1	1.0	1	76799	2	1	74	
NOV 9,88	NOV 8,88	800 800	1030 1730	1	2.2	1	76801	2	1	95	
NOV 10,88	NOV 9,88	800 800	300 800	3	17.4	1	76803	2	1	103	Q N
NOV 11,88	NOV 10,88	800 800	1100 1600	1	7.8	1	76805	2	1	96	
NOV 13,88	NOV 12,88	800 800	30 800	3	11.2	2	76807	2	1	105	
NOV 14,88	NOV 13,88	800 800	800 1830	1	12.7	1	76809	2	1	68	
NOV 15,88	NOV 14,88	800 800	1200 1800	1	1.0	1	76811	2	1	31	
NOV 17,88	NOV 16,88	800 800	1630 1830	3	2.0	1	76813	2	1	96	
NOV 18,88	NOV 17,88	800 800	830 400	2	3.6	2	76815	2	1	99	HM
NOV 20,88	NOV 19,88	800 800	2100 800	3	0.3	4	76817	2	1	93	Q N
NOV 21,88	NOV 20,88	800 800	800 ****	3	6.3	2	76819	2	1	104	HM
NOV 24,88	NOV 23,88	800 800	830 1030	2	****	2	76821	2	1	****	QE
NOV 27,88	NOV 26,88	800 800	1700 630	1	4.8	1	76823	2	1	98	JCM
NOV 28,88	NOV 27,88	800 800	**** 800	1	0.8	1	76825	2	1	74	N
NOV 29,88	NOV 28,88	800 800	900 2300	3	3.6	1	76827	2	1	108	
NOV 30,88	NOV 29,88	800 800	130 800	2	0.6	2	76829	2	1	72	
DEC 1,88	NOV 30,88	800 800	800 430	2	4.4	2	76831	2	1	104	
DEC 2,88	DEC 1,88	800 800	430 745	2	0.6	2	76833	2	1	101	

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REMOVAL DATE	EXPOSURE DATE	SAMPLING START/END HR. HR.	PRECIP START/END HR. HR.	SAMPLE TYPE 01-RAIN 02-SNOW 03-COMP/04-OTHER	GAUGE DEPTH(MM)	GAUGE TYPE 01-STD. 02-NIPHER	SAMPLE NUMBER	PROJECT CODE 02-APIOS 03-SPECIAL	SUBPROJECT CODE 01-MOE 03-AES	SAMPLER EFFICI- ENCY (%)	COMMENTS FIELD OFFICE
AUG 6,88	AUG 5,88	755 715	1930 2030	1	4.6	1	76664	2	1	105	B
AUG 9,88	AUG 8,88	800 800	600 830	1	6.4	1	76668	2	1	119	
AUG 10,88	AUG 9,88	800 800	1900 2100	1	22.7	1	76670	2	1	68	
AUG 11,88	AUG 10,88	800 800	630 800	1	0.5	1	76674	2	1	90	
AUG 12,88	AUG 11,88	800 800	800 930	1	2.2	1	76676	2	1	78	
AUG 14,88	AUG 13,88	730 810	300 330	1	2.2	1	76678	2	1	106	
AUG 15,88	AUG 14,88	810 800	2100 2130	1	10.2	1	76680	2	1	104	C
AUG 16,88	AUG 15,88	800 800	800 ****	1	0.3	1	76682	2	1	119	N
AUG 17,88	AUG 16,88	800 800	630 800	1	2.2	1	76684	2	1	106	
AUG 18,88	AUG 17,88	800 800	800 1030	1	2.0	1	76686	2	1	88	
AUG 21,88	AUG 20,88	745 755	1830 1900	1	5.4	1	76688	2	1	96	
AUG 24,88	AUG 23,88	755 745	2100 740	1	2.2	1	76690	2	1	92	
AUG 25,88	AUG 24,88	745 745	1730 2000	1	8.0	1	76692	2	1	74	C
AUG 26,88	AUG 25,88	745 745	900 1600	1	17.3	1	76694	2	1	99	NHM
AUG 27,88	AUG 26,88	745 810	900 1400	1	1.8	1	76698	2	1	88	HM
AUG 28,88	AUG 27,88	810 810	2300 800	1	0.6	1	76700	2	1	93	
AUG 29,88	AUG 28,88	810 800	1000 1400	1	1.2	1	76702	2	1	76	T
AUG 30,88	AUG 29,88	800 800	1500 1700	1	0.6	1	76704	2	1	140	N
AUG 31,88	AUG 30,88	800 800	1600 1800	1	3.6	1	76706	2	1	94	HM
SEP 1,88	AUG 31,88	800 800	530 630	1	3.2	1	76708	2	1	95	
SEP 4,88	SEP 3,88	744 743	1700 700	1	16.6	1	76710	2	1	100	NT
SEP 5,88	SEP 4,88	743 815	1700 230	1	18.4	1	76714	2	1	105	N
SEP 6,88	SEP 5,88	815 800	1400 2000	1	0.5	1	76716	2	1	46	NHM
SEP 7,88	SEP 6,88	800 800	1730 2000	1	2.0	1	76718	2	1	92	HM
SEP 13,88	SEP 12,88	830 800	1920 300	1	1.8	1	76721	2	1	104	
SEP 14,88	SEP 13,88	800 800	615 750	1	0.8	1	76723	2	1	62	
SEP 15,88	SEP 14,88	800 800	1625 1830	1	0.2	1	76725	2	1	23	N
SEP 17,88	SEP 16,88	800 815	400 700	1	5.5	1	76727	2	1	100	
SEP 18,88	SEP 17,88	815 815	1200 1230	1	2.0	1	76729	2	1	96	
SEP 20,88	SEP 19,88	800 800	130 750	1	23.2	1	76731	2	1	103	N
SEP 21,88	SEP 20,88	800 800	1300 2000	1	6.6	1	76733	2	1	135	
SEP 22,88	SEP 21,88	800 740	845 910	1	0.6	1	76735	2	1	91	
SEP 23,88	SEP 22,88	740 750	2300 800	1	6.7	1	76737	2	1	U 108	FJ
SEP 24,88	SEP 23,88	750 800	800 900	1	****	1	76739	2	1	****	FJ
SEP 27,88	SEP 26,88	800 800	1800 2100	1	0.8	1	76741	2	1	U 70	FJ
SEP 28,88	SEP 27,88	800 800	1230 1400	1	7.7	1	76743	2	1	U 49	FJ
OCT 1,88	SEP 30,88	800 800	1820 2000	1	0.2	1	76745	2	1	U 171	FJ
OCT 2,88	OCT 1,88	800 800	1930 800	1	22.8	1	76747	2	1	101	N
OCT 3,88	OCT 2,88	800 800	800 1330	1	5.8	1	76749	2	1	97	
OCT 5,88	OCT 4,88	800 800	1830 800	1	24.0	1	76751	2	1	102	N

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REMOVAL DATE	EXPOSURE DATE	VOLUME ML	CONDUCT. UMHO/CM	PH FIELD	PH LAB	TOTAL H+ TO PH8.3 MG/L	TOTAL H+ GRAN MG/L	SULPHATE MG/L	NITRATE AS N MG/L
AUG 6,88	AUG 5,88	311.0	95.5	3.73	3.73	*****	0.2240	10.80	1.04
AUG 9,88	AUG 8,88	489.0	39.5	4.10	4.19	*****	0.0924	3.55	0.64
AUG 10,88	AUG 9,88	1000.0	20.0	4.38	4.46	*****	0.0549	1.90	0.26
AUG 11,88	AUG 10,88	29.0	32.0	*****	4.19	*****	0.0897	3.30	0.42
AUG 12,88	AUG 11,88	111.0	15.0	4.41	4.49	*****	0.0543	1.45	0.23
AUG 14,88	AUG 13,88	150.0	89.0	3.77	3.71	*****	0.2330	10.60	1.41
AUG 15,88	AUG 14,88	681.0	10.5	4.57	4.85	*****	0.0375	1.55	0.24
AUG 16,88	AUG 15,88	23.0	13.0	*****	4.51	*****	0.0539	D 1.85	0.09
AUG 17,88	AUG 16,88	150.0	20.0	4.33	4.43	*****	0.0590	1.75	0.79
AUG 18,88	AUG 17,88	113.0	15.0	4.40	4.55	*****	0.0537	1.75	0.39
AUG 21,88	AUG 20,88	335.0	24.0	4.16	4.22	*****	0.0859	3.10	0.10
AUG 24,88	AUG 23,88	131.0	47.0	3.94	3.93	*****	0.1440	3.95	0.92
AUG 25,88	AUG 24,88	380.0	25.5	4.35	4.45	*****	0.0549	1.65	0.27
AUG 26,88	AUG 25,88	1105.0	LG 3.0	5.03	5.23	*****	0.0237	LG 0.25	<T 0.05
AUG 27,88	AUG 26,88	102.0	9.0	4.60	4.58	*****	0.0413	1.05	<W 0.01
AUG 28,88	AUG 27,88	36.0	84.0	*****	!IS *****	*****	!IS *****	8.30	1.80
AUG 29,88	AUG 28,88	59.0	69.0	*****	3.75	*****	0.1770	5.40	1.92
AUG 30,88	AUG 29,88	54.0	14.5	*****	4.51	*****	0.0482	1.25	0.44
AUG 31,88	AUG 30,88	217.0	21.0	4.37	4.32	*****	0.0564	1.80	LG 0.06
SEP 1,88	AUG 31,88	195.0	55.5	3.97	3.92	*****	0.1280	6.70	1.52
SEP 4,88	SEP 3,88	1067.0	80.0	3.70	3.61	*****	0.2240	8.25	0.84
SEP 5,88	SEP 4,88	1242.0	17.0	4.32	4.40	*****	0.0635	1.90	0.08
SEP 6,88	SEP 5,88	15.0	LG 3.0	*****	5.22	*****	0.0249	<T 0.15	<T 0.01
SEP 7,88	SEP 6,88	118.0	3.5	4.79	5.24	*****	0.0239	<T 0.20	<T 0.04
SEP 13,88	SEP 12,88	120.0	58.5	3.92	3.99	*****	0.1520	7.65	1.00
SEP 14,88	SEP 13,88	32.0	13.0	*****	!IS *****	*****	!IS *****	2.00	0.32
SEP 15,88	SEP 14,88	3.0	*****	*****	*****	*****	*****	*****	*****
SEP 17,88	SEP 16,88	356.0	42.0	4.02	4.05	*****	0.1320	4.05	0.69
SEP 18,88	SEP 17,88	124.0	57.0	3.94	3.95	*****	0.1580	6.00	0.96
SEP 20,88	SEP 19,88	1540.0	25.0	4.29	4.29	*****	0.0787	2.90	0.36
SEP 21,88	SEP 20,88	574.0	12.0	4.59	4.71	*****	0.0410	1.55	0.26
SEP 22,88	SEP 21,88	35.0	!IS *****	*****	4.89	*****	0.0389	!IS *****	!IS *****
SEP 23,88	SEP 22,88	466.0	55.0	3.85	3.89	*****	0.1620	4.70	1.08
SEP 24,88	SEP 23,88	2.0	*****	*****	*****	*****	*****	*****	*****
SEP 27,88	SEP 26,88	36.0	20.0	*****	!IS *****	*****	!IS *****	3.30	0.87
SEP 28,88	SEP 27,88	242.0	25.0	UG 5.24	UG 7.21	*****	0.0211	6.15	0.99
OCT 1,88	SEP 30,88	22.0	13.5	*****	UG 5.71	*****	0.0285	2.70	0.57
OCT 2,88	OCT 1,88	1487.0	13.0	4.53	4.67	*****	0.0446	2.10	0.28
OCT 3,88	OCT 2,88	362.0	9.5	4.62	4.68	*****	0.0401	0.80	0.14
OCT 5,88	OCT 4,88	1578.0	9.5	4.67	4.70	*****	0.0406	0.70	0.27

ONTARIO MINISTRY OF THE ENVIRONMENT
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APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : DORSET/DAILY/AEROCHEM

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REMOVAL DATE	EXPOSURE DATE	CALCIUM MG/L	CHLORIDE MG/L	MAGNESIUM MG/L	POTASSIUM MG/L	SODIUM MG/L	AMMONIUM AS N MG/L	FREE H+ LAB MG/L
AUG 6,88	AUG 5,88	0.86	0.21	0.145	0.055	0.030	0.746	0.1862
AUG 9,88	AUG 8,88	0.44	0.15	0.095	0.040	0.040	0.220	0.0646
AUG 10,88	AUG 9,88	<T 0.04	<T 0.04	<T 0.010	<T 0.015	<T 0.010	0.252	0.0347
AUG 11,88	AUG 10,88	!IS *****	0.20	!IS *****	!IS *****	!IS *****	0.234	0.0646
AUG 12,88	AUG 11,88	<T 0.02	<T 0.03	<T 0.005	<T 0.020	<T 0.020	0.076	0.0324
AUG 14,88	AUG 13,88	0.92	0.66	0.180	0.090	0.150	0.960	0.1950
AUG 15,88	AUG 14,88	<T 0.04	<T 0.03	<T 0.020	0.025	<T 0.015	0.356	0.0141
AUG 16,88	AUG 15,88	!IS *****	0.20	!IS *****	!IS *****	!IS *****	<W 0.006	0.0309
AUG 17,88	AUG 16,88	0.26	0.13	0.040	0.050	0.075	0.390	0.0372
AUG 18,88	AUG 17,88	<T 0.08	0.06	<T 0.015	<T 0.020	0.025	0.350	0.0282
AUG 21,88	AUG 20,88	<T 0.06	0.07	<T 0.015	<T 0.020	0.030	<T 0.006	0.0603
AUG 24,88	AUG 23,88	0.14	0.09	<T 0.015	0.035	0.025	0.256	0.1175
AUG 25,88	AUG 24,88	<T 0.04	0.15	<T 0.005	<T 0.025	0.030	0.106	0.0355
AUG 26,88	AUG 25,88	<T 0.08	<W 0.01	<T 0.010	<T 0.015	<T 0.005	0.140	0.0059
AUG 27,88	AUG 26,88	<W 0.02	<W 0.01	<W 0.005	<T 0.010	<T 0.005	0.096	0.0263
AUG 28,88	AUG 27,88	0.90	0.40	0.160	0.145	0.040	1.160	!IS *****
AUG 29,88	AUG 28,88	0.36	0.80	0.065	0.060	0.030	1.270	0.1778
AUG 30,88	AUG 29,88	0.20	0.13	0.030	0.090	0.080	0.266	0.0309
AUG 31,88	AUG 30,88	<W 0.02	B 1.83	<W 0.005	<T 0.020	<T 0.010	0.110	0.0479
SEP 1,88	AUG 31,88	1.54	0.33	0.195	0.080	0.085	0.420	0.1202
SEP 4,88	SEP 3,88	0.12	0.13	<T 0.010	0.025	<T 0.015	0.346	0.2455
SEP 5,88	SEP 4,88	<W 0.02	<W 0.01	<W 0.005	<W 0.005	<W 0.005	0.120	0.0398
SEP 6,88	SEP 5,88	<T 0.02	<T 0.05	<W 0.005	<T 0.015	0.045	<W 0.006	0.0060
SEP 7,88	SEP 6,88	<T 0.04	0.05	<T 0.010	0.025	0.045	<T 0.020	0.0058
SEP 13,88	SEP 12,88	0.86	0.25	0.140	0.055	0.110	0.760	0.1023
SEP 14,88	SEP 13,88	0.24	0.10	0.055	0.075	0.125	0.290	!IS *****
SEP 15,88	SEP 14,88	*****	*****	*****	*****	*****	*****	*****
SEP 17,88	SEP 16,88	0.16	0.12	<T 0.020	0.025	<T 0.020	0.180	0.0891
SEP 18,88	SEP 17,88	0.10	0.08	<T 0.020	<T 0.025	<T 0.020	0.680	0.1122
SEP 20,88	SEP 19,88	<T 0.04	0.08	<T 0.010	<T 0.015	0.025	0.240	0.0513
SEP 21,88	SEP 20,88	0.10	<W 0.01	<T 0.015	<T 0.015	<W 0.005	0.300	0.0195
SEP 22,88	SEP 21,88	!IS *****	!IS *****	!IS *****	!IS *****	!IS *****	<T 0.016	0.0129
SEP 23,88	SEP 22,88	0.14	0.24	<T 0.015	0.030	0.060	0.516	0.1288
SEP 24,88	SEP 23,88	*****	*****	*****	*****	*****	*****	*****
SEP 27,88	SEP 26,88	!IS *****	0.17	!IS *****	!IS *****	!IS *****	0.870	!IS *****
SEP 28,88	SEP 27,88	2.06	0.17	0.260	0.105	0.045	1.220	UG 0.0001
OCT 1,88	SEP 30,88	1.12	0.16	0.140	0.195	0.085	0.360	UG 0.0019
OCT 2,88	OCT 1,88	0.22	0.10	0.035	<T 0.015	0.060	0.376	0.0214
OCT 3,88	OCT 2,88	<T 0.04	<T 0.04	<W 0.005	<T 0.005	<W 0.005	0.046	0.0209
OCT 5,88	OCT 4,88	0.10	<T 0.03	<T 0.010	<T 0.015	0.025	0.140	0.0200

ONTARIO MINISTRY OF THE ENVIRONMENT
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REMOVAL DATE	EXPOSURE DATE	VOLUME ML	CONDUCT. UMHO/CM	PH FIELD	PH LAB	TOTAL H+ TO PH8.3 MG/L	TOTAL H+ GRAN MG/L	SULPHATE MG/L	NITRATE AS N MG/L
OCT 6,88	OCT 5,88	112.0	6.0	4.82	4.84	*****	0.0340	0.45	0.14
OCT 8,88	OCT 7,88	44.0	18.5	*****	4.38	*****	0.0687	2.30	0.38
OCT 11,88	OCT 10,88	648.0	14.5	4.50	4.52	*****	0.0563	2.25	0.47
OCT 12,88	OCT 11,88	133.0	7.0	4.67	4.61	*****	0.0468	1.10	<T 0.02
OCT 13,88	OCT 12,88	20.0	LG 2.0	*****	5.43	*****	0.0217	<T 0.25	<T 0.02
OCT 17,88	OCT 16,88	108.0	28.0	4.31	4.35	*****	0.0741	3.20	0.83
OCT 18,88	OCT 17,88	2072.0	22.0	4.34	4.31	*****	0.0751	2.05	<T 0.01
OCT 19,88	OCT 18,88	9.0	5.5	*****	4.85	*****	0.0369	0.70	<T 0.05
OCT 22,88	OCT 21,88	301.0	32.0	4.17	4.14	*****	0.1010	1.85	0.94
OCT 23,88	OCT 22,88	58.0	23.0	*****	4.27	*****	0.0790	1.05	0.68
OCT 24,88	OCT 23,88	194.0	30.0	4.21	4.16	*****	0.0962	1.80	0.85
OCT 25,88	OCT 24,88	446.0	12.0	4.66	4.66	*****	0.0444	1.30	0.38
OCT 26,88	OCT 25,88	252.0	5.5	4.82	4.78	*****	0.0372	0.55	0.09
OCT 27,88	OCT 26,88	591.0	8.0	4.65	4.71	*****	0.0373	0.90	0.09
OCT 28,88	OCT 27,88	589.0	37.5	4.12	4.07	*****	0.1140	2.80	0.88
OCT 29,88	OCT 28,88	595.0	14.5	4.56	4.56	*****	0.0516	1.85	0.26
OCT 30,88	OCT 29,88	66.0	12.0	*****	4.55	*****	0.0498	1.50	<W 0.01
NOV 2,88	NOV 1,88	8.0	24.0	*****	4.47	*****	0.0607	1.65	1.15
NOV 4,88	NOV 3,88	178.0	29.0	4.25	4.13	*****	0.1020	3.25	0.55
NOV 5,88	NOV 4,88	249.0	48.0	4.01	3.93	*****	0.1450	4.50	1.00
NOV 6,88	NOV 5,88	1311.0	8.5	4.74	4.74	*****	0.0424	0.80	0.16
NOV 7,88	NOV 6,88	134.0	20.5	4.41	4.33	*****	0.0701	2.00	0.56
NOV 8,88	NOV 7,88	48.0	!IS *****	*****	4.01	*****	0.1220	!IS *****	!IS *****
NOV 9,88	NOV 8,88	135.0	29.0	4.18	4.14	*****	0.0976	2.30	0.83
NOV 10,88	NOV 9,88	1156.0	32.0	4.16	4.11	*****	0.1030	3.40	0.59
NOV 11,88	NOV 10,88	482.0	24.5	4.35	4.21	*****	0.0948	2.80	0.35
NOV 13,88	NOV 12,88	757.0	25.5	4.31	4.18	*****	0.0912	1.90	0.63
NOV 14,88	NOV 13,88	558.0	20.0	4.39	4.33	*****	0.0695	1.80	0.35
NOV 15,88	NOV 14,88	20.0	15.5	*****	4.45	*****	0.0664	1.50	0.54
NOV 17,88	NOV 16,88	124.0	47.0	4.04	4.00	*****	0.1370	5.70	0.94
NOV 18,88	NOV 17,88	229.0	11.0	4.82	4.91	*****	0.0354	1.85	<W 0.01
NOV 20,88	NOV 19,88	18.0	!IS *****	*****	3.94	*****	0.1630	2.95	1.56
NOV 21,88	NOV 20,88	422.0	10.0	4.61	4.64	*****	0.0465	1.15	<T 0.02
NOV 24,88	NOV 23,88	5.0	*****	*****	*****	*****	*****	*****	*****
NOV 27,88	NOV 26,88	303.0	44.0	4.03	3.83	*****	0.1650	3.95	0.74
NOV 28,88	NOV 27,88	38.0	!IS *****	*****	3.83	*****	0.1720	!IS *****	!IS *****
NOV 29,88	NOV 28,88	250.0	15.0	4.48	4.45	*****	0.0545	1.55	0.36
NOV 30,88	NOV 29,88	28.0	!IS *****	*****	4.13	*****	0.1040	0.80	1.71
DEC 1,88	NOV 30,88	295.0	36.0	4.16	4.10	*****	0.1010	1.70	1.19
DEC 2,88	DEC 1,88	39.0	!IS *****	*****	4.65	*****	0.0370	!IS *****	!IS *****

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REMOVAL DATE	EXPOSURE DATE	CALCIUM MG/L	CHLORIDE MG/L	MAGNESIUM MG/L	POTASSIUM MG/L	SODIUM MG/L	AMMONIUM AS N MG/L	FREE H+ LAB MG/L
OCT 6,88	OCT 5,88	<W 0.02	<W 0.01	<W 0.005	<T 0.005	<T 0.015	<T 0.020	0.0145
OCT 8,88	OCT 7,88	0.26	0.12	<T 0.025	0.040	0.130	<W 0.006	0.0417
OCT 11,88	OCT 10,88	0.10	0.08	<T 0.020	0.035	<T 0.015	0.620	0.0302
OCT 12,88	OCT 11,88	<T 0.02	<W 0.01	<W 0.005	<T 0.015	<T 0.005	<W 0.006	0.0245
OCT 13,88	OCT 12,88	<W 0.02	0.11	<T 0.005	0.035	0.075	<T 0.016	0.0037
OCT 17,88	OCT 16,88	0.24	0.05	0.040	0.045	0.040	0.926	0.0447
OCT 18,88	OCT 17,88	<T 0.06	<T 0.02	<T 0.005	<T 0.020	<T 0.015	0.286	0.0490
OCT 19,88	OCT 18,88	<T 0.08	<W 0.01	<T 0.010	0.030	0.025	!IS *****	0.0141
OCT 22,88	OCT 21,88	<T 0.08	0.07	<T 0.010	<T 0.020	<T 0.015	0.270	0.0724
OCT 23,88	OCT 22,88	<T 0.08	0.05	<T 0.010	<T 0.015	<T 0.025	0.070	0.0537
OCT 24,88	OCT 23,88	<T 0.08	<T 0.03	<T 0.015	<T 0.020	0.070	0.200	0.0692
OCT 25,88	OCT 24,88	0.18	<T 0.05	<T 0.020	<T 0.025	0.030	0.216	0.0219
OCT 26,88	OCT 25,88	<W 0.02	<W 0.01	<W 0.005	<T 0.010	<T 0.020	<T 0.010	0.0166
OCT 27,88	OCT 26,88	<W 0.02	<W 0.01	<W 0.005	<W 0.005	<W 0.005	0.086	0.0195
OCT 28,88	OCT 27,88	0.20	0.29	0.025	0.070	0.075	0.256	0.0851
OCT 29,88	OCT 28,88	0.10	<W 0.01	<T 0.020	<T 0.005	<W 0.005	0.350	0.0275
OCT 30,88	OCT 29,88	<T 0.04	<T 0.04	<T 0.010	<W 0.005	<T 0.015	<T 0.020	0.0282
NOV 2,88	NOV 1,88	1.12	0.32	0.135	0.035	0.095	0.260	0.0339
NOV 4,88	NOV 3,88	0.22	0.15	<T 0.015	<T 0.020	0.030	0.186	0.0741
NOV 5,88	NOV 4,88	0.22	0.48	0.035	0.040	0.205	0.386	0.1175
NOV 6,88	NOV 5,88	<W 0.02	0.10	<T 0.010	<T 0.005	0.050	0.096	0.0182
NOV 7,88	NOV 6,88	0.14	0.12	<T 0.020	<T 0.015	<T 0.025	0.330	0.0468
NOV 8,88	NOV 7,88	0.20	!IS *****	0.025	0.110	0.180	0.696	0.0977
NOV 9,88	NOV 8,88	<T 0.08	0.19	<T 0.010	<T 0.015	<T 0.015	0.446	0.0724
NOV 10,88	NOV 9,88	0.20	0.58	0.030	0.035	0.170	0.326	0.0776
NOV 11,88	NOV 10,88	<T 0.08	0.11	<T 0.010	<T 0.010	0.030	0.310	0.0617
NOV 13,88	NOV 12,88	0.14	0.15	<T 0.015	<T 0.015	0.050	0.270	0.0661
NOV 14,88	NOV 13,88	<T 0.04	0.09	<W 0.005	<T 0.005	<T 0.010	0.160	0.0468
NOV 15,88	NOV 14,88	!IS *****	0.09	!IS *****	!IS *****	!IS *****	0.360	0.0355
NOV 17,88	NOV 16,88	0.88	0.37	0.110	0.045	0.180	0.566	0.1000
NOV 18,88	NOV 17,88	0.28	0.07	0.055	<T 0.015	<T 0.015	0.346	0.0123
NOV 20,88	NOV 19,88	!IS *****	0.24	!IS *****	!IS *****	!IS *****	0.080	0.1148
NOV 21,88	NOV 20,88	0.10	<T 0.04	<T 0.010	<T 0.010	<T 0.025	0.076	0.0229
NOV 24,88	NOV 23,88	*****	*****	*****	*****	*****	*****	*****
NOV 27,88	NOV 26,88	0.18	0.53	0.040	0.025	0.195	0.200	0.1479
NOV 28,88	NOV 27,88	0.52	!IS *****	0.075	0.095	0.180	1.120	0.1479
NOV 29,88	NOV 28,88	<W 0.02	0.21	<W 0.005	<T 0.010	<T 0.010	0.250	0.0355
NOV 30,88	NOV 29,88	0.86	0.40	0.065	0.035	0.120	0.040	0.0741
DEC 1,88	NOV 30,88	0.14	0.24	<T 0.025	0.030	0.035	0.330	0.0794
DEC 2,88	DEC 1,88	!IS *****	!IS *****	!IS *****	!IS *****	!IS *****	<T 0.010	0.0224

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REMOVAL DATE	EXPOSURE DATE	SAMPLING START/END HR. HR.	PRECIP START/END HR. HR.	SAMPLE TYPE 01-RAIN 02-SNOW 03-COMP/04-OTHER	GAUGE DEPTH(MM)	GAUGE TYPE 01-STD. 02-NIPHER	SAMPLE NUMBER	PROJECT CODE 02-APIOS 03-SPECIAL	SUBPROJECT CODE 01-MOE 03-AES	SAMPLER EFFICI- ENCY (%)	COMMENTS FIELD OFFICE
DEC 4,88	DEC 3,88	800 800	1530 1730	3	0.3	2	76835	2	1	150	
DEC 9,88	DEC 8,88	800 800	630 630	2	4.2	2	76843	2	1	90	
DEC 13,88	DEC 12,88	800 800	600 800	2	0.4	2	76846	2	1	89	
DEC 14,88	DEC 13,88	800 800	1100 1100	2	0.2	2	76848	2	1	257	N
DEC 15,88	DEC 14,88	800 800	1300 800	2	4.5	2	76850	2	1	72	
DEC 17,88	DEC 16,88	800 800	****	2	****	2	76854	2	1	****	Q
DEC 18,88	DEC 17,88	800 800	****	2	0.3	2	76856	2	1	156	N
DEC 19,88	DEC 18,88	800 800	****	2	0.2	2	76858	2	1	163	
DEC 20,88	DEC 19,88	800 800	830 1045	3	0.6	2	76860	2	1	166	N
DEC 21,88	DEC 20,88	800 800	1400 300	3	6.2	2	76862	2	1	110	C
DEC 23,88	DEC 22,88	800 800	330 800	3	5.8	2	76864	2	1	74	FJ
DEC 24,88	DEC 23,88	800 800	****	2	4.6	2	76866	2	1	61	
DEC 25,88	DEC 24,88	800 800	****	2	4.4	2	76868	2	1	86	HM
DEC 26,88	DEC 25,88	800 900	****	2	0.1	2	76870	2	1	686	N
DEC 27,88	DEC 26,88	900 830	****	2	2.2	2	76872	2	1	98	CM
DEC 28,88	DEC 27,88	830 730	****	2	20.0	2	76874	2	1	75	N
DEC 29,88	DEC 28,88	730 800	****	2	0.7	2	76876	2	1	17	
DEC 30,88	DEC 29,88	800 745	****	2	0.5	2	76878	2	1	28	
DEC 31,88	DEC 30,88	745 820	****	2	1.8	2	76880	2	1	75	

ONTARIO MINISTRY OF THE ENVIRONMENT
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REMOVAL DATE	EXPOSURE DATE	VOLUME ML	CONDUCT. UMHO/CM	PH FIELD	PH LAB	TOTAL H+ TO PH8.3 MG/L	TOTAL H+ GRAN MG/L	SULPHATE MG/L	NITRATE AS N MG/L
DEC 4,88	DEC 3,88	29.0	!IS *****	*****	!IS *****	*****	!IS *****	!IS *****	!IS *****
DEC 9,88	DEC 8,88	243.0	7.8	4.86	4.91	*****	0.0275	0.30	0.20
DEC 13,88	DEC 12,88	23.0	!IS *****	*****	4.59	*****	0.0460	!IS *****	!IS *****
DEC 14,88	DEC 13,88	33.0	!IS *****	*****	4.01	*****	0.1410	!IS *****	!IS *****
DEC 15,88	DEC 14,88	210.0	40.6	4.14	4.13	*****	0.1070	1.80	1.17
DEC 17,88	DEC 16,88	9.0	!IS *****	*****	UG 5.99	*****	0.0158	!IS *****	!IS *****
DEC 18,88	DEC 17,88	30.0	!IS *****	*****	UG 5.83	*****	LG 0.0116	!IS *****	!IS *****
DEC 19,88	DEC 18,88	21.0	!IS *****	*****	4.71	*****	0.0367	!IS *****	!IS *****
DEC 20,88	DEC 19,88	64.0	55.0	*****	3.97	*****	0.1200	4.50	1.16
DEC 21,88	DEC 20,88	438.0	D 30.5	4.31	4.31	*****	0.0676	3.50	0.49
DEC 23,88	DEC 22,88	277.0	12.0	4.55	4.71	*****	0.0372	1.10	0.31
DEC 24,88	DEC 23,88	181.0	13.0	4.54	4.53	*****	0.0497	0.70	0.40
DEC 25,88	DEC 24,88	243.0	17.0	4.65	4.62	*****	0.0422	<T 0.10	0.43
DEC 26,88	DEC 25,88	44.0	42.5	*****	4.87	*****	0.0333	1.45	0.15
DEC 27,88	DEC 26,88	139.0	LG 2.0	UG 5.26	5.35	*****	0.0203	LG 0.20	LG 0.06
DEC 28,88	DEC 27,88	963.0	12.0	4.53	4.50	*****	0.0503	1.13	0.26
DEC 29,88	DEC 28,88	8.0	4.0	*****	4.98	*****	0.0278	0.35	0.12
DEC 30,88	DEC 29,88	9.0	4.0	*****	4.99	*****	0.0283	<T 0.20	0.13
DEC 31,88	DEC 30,88	87.0	40.0	*****	4.09	*****	0.1030	2.25	1.35

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : DORSET/DAILY/AEROCHEM #08 PAGE : 18

REMOVAL DATE	EXPOSURE DATE	CALCIUM MG/L	CHLORIDE MG/L	MAGNESIM MG/L	POTASSIM MG/L	SODIUM MG/L	AMMONIUM AS N MG/L	FREE H+ LAB MG/L
DEC 4,88	DEC 3,88	!IS *****	!IS *****	!IS *****	!IS *****	!IS *****	!IS *****	!IS *****
DEC 9,88	DEC 8,88	<T 0.08	0.06	<T 0.015	<W 0.005	0.025	0.030	0.0123
DEC 13,88	DEC 12,88	!IS *****	!IS *****	!IS *****	!IS *****	!IS *****	!IR *****	0.0257
DEC 14,88	DEC 13,88	!IS *****	!IS *****	!IS *****	!IS *****	!IS *****	!IR *****	0.0977
DEC 15,88	DEC 14,88	0.32	0.43	0.030	0.035	0.060	0.496	0.0741
DEC 17,88	DEC 16,88	0.30	!IS *****	0.035	0.050	0.560	<T 0.020	UG 0.0010
DEC 18,88	DEC 17,88	!IS *****	!IS *****	!IS *****	!IS *****	!IS *****	<T 0.016	UG 0.0015
DEC 19,88	DEC 18,88	0.14	!IS *****	<T 0.010	0.050	0.585	<T 0.016	0.0195
DEC 20,88	DEC 19,88	0.88	0.75	0.085	0.075	0.340	0.346	0.1072
DEC 21,88	DEC 20,88	0.58	0.36	0.055	0.080	0.205	D 0.376	0.0490
DEC 23,88	DEC 22,88	0.26	0.46	0.025	0.040	0.315	0.090	0.0195
DEC 24,88	DEC 23,88	<T 0.06	0.17	<W 0.005	<T 0.015	0.095	0.086	0.0295
DEC 25,88	DEC 24,88	0.24	UG 1.60	<T 0.020	0.030	UG 1.010	0.176	0.0240
DEC 26,88	DEC 25,88	!IS *****	!IR *****	!IS *****	!IS *****	!IS *****	0.090	0.0135
DEC 27,88	DEC 26,88	<T 0.02	0.15	<W 0.005	<W 0.005	0.075	<T 0.016	0.0045
DEC 28,88	DEC 27,88	<W 0.02	0.10	<W 0.005	<T 0.005	0.025	0.110	0.0316
DEC 29,88	DEC 28,88	!IS *****	<T 0.04	!IS *****	!IS *****	!IS *****	<T 0.016	0.0105
DEC 30,88	DEC 29,88	!IS *****	0.17	!IS *****	!IS *****	!IS *****	<T 0.016	0.0102
DEC 31,88	DEC 30,88	0.26	0.61	0.035	0.030	0.255	0.496	0.0813

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : NITHGROVE/DAILY/AEROCHEM

#07

PAGE : 1

REMOVAL DATE	EXPOSURE DATE	SAMPLING START/END HR. HR.	PRECIP START/END HR. HR.	SAMPLE TYPE 01-RAIN 02-SNOW 03-COMP/04-OTHER	GAUGE DEPTH(MM)	GAUGE TYPE 01-STD. 02-NIPHER	SAMPLE NUMBER	PROJECT CODE 02-APIOS 03-SPECIAL	SUBPROJECT CODE 01-MOE 03-AES	SAMPLER EFFICI- ENCY (%)	COMMENTS FIELD OFFICE
JAN 1,88	DEC 31,87	900 900	1000 1500	2	9.0	2	49604	2	1	50	
JAN 2,88	JAN 1,88	900 900	1100 1500	2	9.8	2	49605	2	1	64	JM
JAN 5,88	JAN 4,88	730 735	930 1200	2	11.2	2	49607	2	1	33	NM
JAN 11,88	JAN 10,88	800 800	940 1100	2	1.2	2	49608	2	1	****	EF
JAN 13,88	JAN 12,88	800 800	100 300	2	12.2	2	49609	2	1	71	
JAN 19,88	JAN 18,88	800 755	1300 1500	3	1.6	2	49612	2	1	120	N
JAN 20,88	JAN 19,88	755 800	500 800	1	6.0	2	49613	2	1	106	
JAN 21,88	JAN 20,88	800 755	530 755	2	1.0	2	49614	2	1	59	
JAN 23,88	JAN 22,88	800 900	600 900	2	1.4	2	49615	2	1	18	N
JAN 24,88	JAN 23,88	900 730	900 1130	2	2.0	2	49616	2	1	47	N
JAN 25,88	JAN 24,88	730 730	1200 1400	2	4.6	2	49617	2	1	78	
JAN 28,88	JAN 27,88	730 815	400 530	2	2.2	2	49618	2	1	68	
JAN 31,88	JAN 30,88	800 900	1000 1400	1	7.6	2	49619	2	1	90	
FEB 1,88	JAN 31,88	900 900	900 1300	1	12.8	2	49620	2	1	105	
FEB 2,88	FEB 1,88	900 730	400 600	2	3.6	2	49621	2	1	54	M
FEB 4,88	FEB 3,88	800 800	2300 100	2	0.8	2	49622	2	1	122	NHCH
FEB 6,88	FEB 5,88	730 830	1000 1200	2	3.0	2	49623	2	1	61	M
FEB 8,88	FEB 7,88	800 730	2200 2330	2	3.2	2	49624	2	1	39	N
FEB 10,88	FEB 9,88	800 715	400 500	2	1.0	2	49625	2	1	20	N
FEB 13,88	FEB 12,88	815 800	900 1200	2	9.8	2	49627	2	1	62	
FEB 15,88	FEB 14,88	800 815	400 815	3	12.4	2	49628	2	1	93	
FEB 17,88	FEB 16,88	715 800	1300 1500	3	7.6	2	49629	2	1	87	
FEB 29,88	FEB 18,88	800 900	****	2	38.2	2	49630	2	1	69	JHZ
MAR 2,88	MAR 1,88	800 800	600 700	2	0.4	2	49631	2	1	74	A
MAR 9,88	MAR 8,88	715 730	530 730	1	4.6	2	49632	2	1	121	N
MAR 10,88	MAR 9,88	730 740	100 300	3	1.0	2	49633	2	1	145	C
MAR 13,88	MAR 12,88	800 805	500 705	2	6.2	2	49634	2	1	90	
MAR 14,88	MAR 13,88	805 705	1500 1630	2	2.8	2	49635	2	1	63	
MAR 19,88	MAR 18,88	730 900	1500 1700	2	1.6	2	49638	2	1	95	
MAR 25,88	MAR 24,88	800 740	400 600	1	1.0	2	49639	2	1	185	N
MAR 28,88	MAR 25,88	740 800	****	3	18.2	2	49640	2	1	120	NY3
MAR 29,88	MAR 28,88	800 740	500 600	1	0.6	2	49641	2	1	205	N
MAR 31,88	MAR 30,88	700 740	930 1030	1	0.2	2	49643	2	1	928	N
APR 5,88	APR 2,88	800 1520	****	1	17.1	2	49644	2	1	97	Y3
APR 7,88	APR 6,88	900 930	300 930	1	3.1	2	49647	2	1	130	NC
APR 8,88	APR 7,88	930 1100	1600 2400	1	7.0	2	49648	2	1	105	
APR 14,88	APR 12,88	800 1000	****	1	12.8	1	49649	2	1	103	Y2
APR 15,88	APR 14,88	1000 1100	1000 1300	1	3.0	1	49650	2	1	89	
APR 20,88	APR 15,88	1100 1400	****	3	9.0	1	49651	2	1	68	JHMZ
APR 22,88	APR 20,88	1400 1100	****	2	6.8	1	49652	2	1	97	JY2

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : NITHGROVE/DAILY/AEROCHEM

#07

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REMOVAL DATE	EXPOSURE DATE	VOLUME ML	CONDUCT. UMHO/CM	PH FIELD	PH LAB	TOTAL H+ TO PH8.3 MG/L	TOTAL H+ GRAN MG/L	SULPHATE MG/L	NITRATE AS N MG/L				
JAN 1,88	DEC 31,87	293.0	13.5	UG	5.12	D	5.26	*****	D	0.0333	2.25	0.46	
JAN 2,88	JAN 1,88	408.0	4.0	B	6.03	UG	6.78	*****	D	0.0184	0.50	0.16	
JAN 5,88	JAN 4,88	244.0	4.5	B	6.54	UG	6.89	*****		0.0167	0.40	0.19	
JAN 11,88	JAN 10,88	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	
JAN 13,88	JAN 12,88	558.0	32.0		4.28		4.26	*****		0.0795	2.55	0.86	
JAN 19,88	JAN 18,88	124.0	36.0		4.09		4.04	*****		0.1100	2.15	0.90	
JAN 20,88	JAN 19,88	408.0	17.5		4.42		4.43	*****		0.0542	1.65	0.30	
JAN 21,88	JAN 20,88	38.0	!IS *****	*****	!IR *****	*****	!IR *****	*****	!IR *****	!IS *****	!IS *****	!IS *****	
JAN 23,88	JAN 22,88	17.0	!IS *****	*****	!IR *****	*****	!IR *****	*****	!IR *****	!IS *****	!IS *****	!IS *****	
JAN 24,88	JAN 23,88	61.0	D	18.0	*****	B	6.68	*****	D	0.0219	1.70	1.11	
JAN 25,88	JAN 24,88	232.0	29.0		4.29		4.30	*****		0.0786	2.20	0.80	
JAN 28,88	JAN 27,88	96.0	13.0	UG	5.07	D	5.46	*****	D	0.0295	0.35	1.04	
JAN 31,88	JAN 30,88	440.0	73.0		3.91		3.96	*****		0.1500	7.65	1.93	
FEB 1,88	JAN 31,88	864.0	21.5		4.32		4.41	*****		0.0615	2.25	0.33	
FEB 2,88	FEB 1,88	125.0	11.0	UG	6.74	B	7.33	*****		0.0171	0.65	0.21	
FEB 4,88	FEB 3,88	63.0	8.5	*****	*****	UG	5.74	*****		0.0261	0.60	0.82	
FEB 6,88	FEB 5,88	118.0	5.5	UG	6.87	UG	7.19	*****		0.0207	0.25	0.13	
FEB 8,88	FEB 7,88	81.0	15.5	*****	*****		4.77	*****		0.0439	0.70	0.98	
FEB 10,88	FEB 9,88	13.0	!IS *****	*****	B	7.00	*****	0.0205	!IS *****	!IS *****	!IS *****	!IS *****	
FEB 13,88	FEB 12,88	391.0	25.5		4.31		4.28	*****		0.0761	1.20	0.94	
FEB 15,88	FEB 14,88	743.0	28.0		4.23		4.23	*****		0.0848	1.85	0.68	
FEB 17,88	FEB 16,88	424.0	14.5		4.62		4.80	*****		0.0466	1.90	0.36	
FEB 29,88	FEB 18,88	1711.0	14.0	UG	5.70	UG	6.47	*****		0.0223	1.75	0.82	
MAR 2,88	MAR 1,88	19.0	35.5	*****	*****	B	7.47	*****		0.0154	1.85	0.98	
MAR 9,88	MAR 8,88	357.0	93.0		3.87		3.85	*****		0.2020	8.20	1.84	
MAR 10,88	MAR 9,88	93.0	41.0	B	7.06	UG	7.22	*****		0.0157	D	4.85	1.35
MAR 13,88	MAR 12,88	359.0	27.5		4.51	D	4.46	*****		0.0629	2.80	0.68	
MAR 14,88	MAR 13,88	114.0	18.0		4.80		4.85	*****		0.0353	1.45	0.58	
MAR 19,88	MAR 18,88	98.0	20.0	B	6.98	B	6.81	*****		0.0204	1.70	0.95	
MAR 25,88	MAR 24,88	119.0	57.5		3.94		3.95	*****		0.1360	5.85	0.97	
MAR 28,88	MAR 25,88	1407.0	23.0		4.44		4.50	*****		0.0544	2.35	0.53	
MAR 29,88	MAR 28,88	79.0	17.0	*****	*****		4.70	*****		0.0404	1.95	0.40	
MAR 31,88	MAR 30,88	119.0	39.0		4.14		4.22	*****		0.0905	5.25	0.69	
APR 5,88	APR 2,88	1074.0	30.5		4.16		4.21	*****		0.0818	2.55	0.40	
APR 7,88	APR 6,88	259.0	> 100.0	LG	3.60	LG	3.55	*****	UG	0.3560	UG	11.30	2.50
APR 8,88	APR 7,88	473.0	62.5		3.90		3.90	*****		0.1580	5.25	0.94	
APR 14,88	APR 12,88	851.0	37.0		4.28		4.40	*****		0.0713	3.55	1.06	
APR 15,88	APR 14,88	172.0	45.0		4.04		4.13	*****		0.1110	4.75	0.82	
APR 20,88	APR 15,88	398.0	12.5	UG	6.53	UG	7.51	*****		0.0168	1.70	0.40	
APR 22,88	APR 20,88	424.0	13.0	UG	5.24	UG	6.11	*****		0.0208	1.95	0.64	

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : NITHGROVE/DAILY/AEROCHEM

#07

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REMOVAL DATE	EXPOSURE DATE	CALCIUM MG/L	CHLORIDE MG/L	MAGNESIM MG/L	POTASSIM MG/L	SODIUM MG/L	AMMONIUM AS N MG/L	FREE H+ LAB MG/L
JAN 1,88	DEC 31,87	0.16	0.12	0.030	<T 0.010	0.030	D 0.950	D 0.0055
JAN 2,88	JAN 1,88	<W 0.02	0.09	<T 0.005	<T 0.010	0.025	D 0.525	UG 0.0002
JAN 5,88	JAN 4,88	<T 0.06	0.11	<T 0.010	<T 0.010	0.030	D 0.560	UG 0.0001
JAN 11,88	JAN 10,88	*****	*****	*****	*****	*****	*****	*****
JAN 13,88	JAN 12,88	0.16	0.13	0.030	<T 0.020	0.035	0.785	0.0550
JAN 19,88	JAN 18,88	<T 0.04	0.12	<T 0.005	0.025	0.035	0.245	0.0912
JAN 20,88	JAN 19,88	0.20	0.07	<T 0.010	<T 0.020	0.040	0.085	0.0372
JAN 21,88	JAN 20,88	!IS *****	!IS *****	!IS *****	!IS *****	!IS *****	!IR *****	!IR *****
JAN 23,88	JAN 22,88	!IS *****	!IS *****	!IS *****	!IS *****	!IS *****	D 1.290	!IR *****
JAN 24,88	JAN 23,88	!IS *****	0.37	!IS *****	!IS *****	!IS *****	D 1.780	B 0.0002
JAN 25,88	JAN 24,88	<T 0.06	0.26	<T 0.010	0.040	0.040	D 0.670	0.0501
JAN 28,88	JAN 27,88	0.32	0.14	!IS *****	<T 0.015	0.070	0.850	D 0.0035
JAN 31,88	JAN 30,88	0.94	1.09	0.130	0.135	UG 0.670	1.660	0.1096
FEB 1,88	JAN 31,88	<T 0.04	0.29	<T 0.025	0.050	0.155	0.320	0.0389
FEB 2,88	FEB 1,88	<T 0.02	0.22	<W 0.005	0.040	0.155	D 1.390	B 0.0000
FEB 4,88	FEB 3,88	0.10	0.56	<T 0.010	<T 0.025	0.045	D 0.830	UG 0.0018
FEB 6,88	FEB 5,88	<T 0.10	0.11	<T 0.010	0.055	0.080	D 0.680	UG 0.0001
FEB 8,88	FEB 7,88	0.18	0.24	0.030	0.055	0.115	D 0.740	0.0170
FEB 10,88	FEB 9,88	!IS *****	!IS *****	!IS *****	!IS *****	!IS *****	D 0.660	B 0.0001
FEB 13,88	FEB 12,88	0.14	0.13	<T 0.015	0.030	<T 0.025	0.540	0.0525
FEB 15,88	FEB 14,88	<T 0.06	0.18	<T 0.010	0.085	0.105	0.330	0.0589
FEB 17,88	FEB 16,88	<T 0.04	<T 0.05	<W 0.005	<T 0.010	<T 0.025	0.630	0.0158
FEB 29,88	FEB 18,88	0.34	0.17	0.060	<T 0.020	0.100	1.060	UG 0.0003
MAR 2,88	MAR 1,88	!IS *****	0.38	!IS *****	!IS *****	!IS *****	3.700	B 0.0000
MAR 9,88	MAR 8,88	1.14	0.49	0.145	0.090	0.225	1.200	0.1413
MAR 10,88	MAR 9,88	0.36	0.35	0.045	0.125	0.125	D 3.600	UG 0.0001
MAR 13,88	MAR 12,88	0.54	0.17	0.050	0.035	0.075	0.730	D 0.0347
MAR 14,88	MAR 13,88	0.10	0.25	<T 0.020	D 0.045	0.110	0.700	0.0141
MAR 19,88	MAR 18,88	<T 0.04	0.23	<T 0.015	<T 0.010	0.055	D 1.860	B 0.0002
MAR 25,88	MAR 24,88	0.62	0.41	0.095	0.050	0.195	0.590	0.1122
MAR 28,88	MAR 25,88	0.30	0.19	0.040	0.055	0.110	0.500	0.0316
MAR 29,88	MAR 28,88	0.40	0.26	0.035	D 0.170	0.125	0.290	0.0200
MAR 31,88	MAR 30,88	1.00	0.35	0.110	0.070	0.200	0.530	0.0603
APR 5,88	APR 2,88	<T 0.08	0.16	<T 0.010	<T 0.025	0.065	0.230	0.0617
APR 7,88	APR 6,88	D 1.18	D 0.47	0.130	0.170	D 0.210	0.960	LG 0.2818
APR 8,88	APR 7,88	0.16	0.16	<T 0.020	0.065	0.060	0.600	0.1259
APR 14,88	APR 12,88	0.82	0.19	0.060	0.050	0.050	0.740	0.0398
APR 15,88	APR 14,88	0.24	0.16	0.055	0.080	0.035	0.840	0.0741
APR 20,88	APR 15,88	0.84	0.23	0.165	0.160	0.115	0.390	UG 0.0000
APR 22,88	APR 20,88	0.60	0.11	0.105	0.045	0.040	0.750	UG 0.0008

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : NITHGROVE/DAILY/AEROCHEM

#07

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REMOVAL DATE	EXPOSURE DATE	SAMPLING START/END HR. HR.		PRECIP START/END HR. HR.		SAMPLE TYPE 01-RAIN 02-SNOW 03-COMP/04-OTHER	GAUGE DEPTH(MM)	GAUGE TYPE 01-STD. 02-NIPHER	SAMPLE NUMBER	PROJECT CODE 02-APIOS 03-SPECIAL	SUBPROJECT CODE 01-MOE 03-AES	SAMPLER EFFICI- ENCY (%)	COMMENTS FIELD OFFICE
APR 26,88	APR 22,88	1100	1100	****	****	3	23.8	1	49653	2	1	92	Y4 NHCHMY4 N
APR 30,88	APR 26,88	1100	830	1600	1800	1	8.8	1	49654	2	1	168	
MAY 9,88	MAY 8,88	830	730	400	500	1	0.6	1	49655	2	1	31	
MAY 10,88	MAY 9,88	730	730	2130	2230	1	10.0	1	49656	2	1	91	
MAY 11,88	MAY 10,88	730	730	400	600	1	1.0	1	49657	2	1	62	C CAB
MAY 13,88	MAY 12,88	730	800	530	800	1	7.0	1	49658	2	1	96	
MAY 14,88	MAY 13,88	800	800	800	930	1	1.6	1	49659	2	1	74	
MAY 16,88	MAY 15,88	800	730	1100	1130	1	30.4	1	49660	2	1	101	
MAY 17,88	MAY 16,88	730	730	1600	1700	1	5.8	1	49663	2	1	103	
MAY 20,88	MAY 19,88	730	730	400	500	1	2.0	1	49664	2	1	82	
MAY 22,88	MAY 20,88	730	900	400	500	1	15.8	1	49665	2	1	100	
MAY 27,88	MAY 26,88	730	745	1600	1630	1	****	1	49666	2	1	****	
JUN 2,88	JUN 1,88	730	730	1000	1030	1	0.8	1	49668	2	1	74	HMY2 X
JUN 7,88	JUN 6,88	715	730	1530	1600	1	0.2	1	49669	2	1	109	
JUN 22,88	JUN 21,88	800	1200	500	1200	1	14.2	1	49671	2	1	101	
JUN 26,88	JUN 25,88	800	900	400	600	1	12.0	1	49674	2	1	69	
JUN 29,88	JUN 28,88	730	730	1030	1130	1	7.2	1	49675	2	1	104	C C
JUL 1,88	JUN 30,88	700	830	1030	1130	1	1.0	1	49676	2	1	90	
JUL 11,88	JUL 10,88	900	815	400	500	1	9.2	1	49677	2	1	98	
JUL 12,88	JUL 11,88	815	800	300	315	1	0.6	1	49678	2	1	38	
JUL 14,88	JUL 13,88	730	745	300	430	1	16.6	1	49679	2	1	50	
JUL 16,88	JUL 15,88	745	800	400	430	1	1.6	1	49682	2	1	66	
JUL 19,88	JUL 18,88	800	800	1400	1430	1	0.4	1	49683	2	1	31	
JUL 21,88	JUL 20,88	730	745	1800	1830	1	****	1	49684	2	1	****	
JUL 23,88	JUL 22,88	710	800	1400	1430	1	0.8	1	49685	2	1	58	N X
JUL 25,88	JUL 24,88	800	730	900	1100	1	6.6	1	49686	2	1	97	
JUL 26,88	JUL 25,88	730	800	400	500	1	0.6	1	49687	2	1	38	
JUL 27,88	JUL 26,88	800	730	1730	1830	1	****	1	49688	2	1	****	
JUL 28,88	JUL 27,88	730	730	1200	1230	1	0.3	1	49689	2	1	26	XN X N N
AUG 5,88	AUG 4,88	730	730	1500	1530	1	1.2	1	49690	2	1	32	
AUG 6,88	AUG 5,88	730	800	1400	1440	1	14.0	1	49691	2	1	97	
AUG 9,88	AUG 8,88	745	800	530	800	1	10.2	1	49692	2	1	99	
AUG 10,88	AUG 9,88	800	700	2200	2300	1	16.8	1	49693	2	1	100	
AUG 12,88	AUG 11,88	700	730	800	1000	1	4.8	1	49697	2	1	88	
AUG 15,88	AUG 14,88	800	720	730	930	1	7.8	1	49696	2	1	109	
AUG 17,88	AUG 16,88	725	745	550	745	1	3.2	1	49698	2	1	****	
AUG 18,88	AUG 17,88	745	730	745	900	1	5.6	1	49699	2	1	99	GE HCM N
AUG 21,88	AUG 20,88	800	900	1350	1430	1	0.6	1	49700	2	1	20	
AUG 24,88	AUG 23,88	745	730	2300	2430	1	2.2	1	49701	2	1	73	
AUG 25,88	AUG 24,88	730	730	1800	2000	1	15.8	1	49702	2	1	100	

ONTARIO MINISTRY OF THE ENVIRONMENT
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REMOVAL DATE	EXPOSURE DATE	VOLUME ML	CONDUCT. UMHO/CM	PH FIELD	PH LAB	TOTAL H+ TO PH8.3 MG/L	TOTAL H+ GRAN MG/L	SULPHATE MG/L	NITRATE AS N MG/L	
APR 26,88	APR 22,88	1415.0	30.5	4.24	UCR	4.30	*****	0.0870	2.85	0.70
APR 30,88	APR 26,88	948.0	32.0	4.16		4.40	*****	0.0702	2.45	0.65
MAY 9,88	MAY 8,88	12.0	> 100.0	*****	UCR	3.64	*****	UCR 0.3200	> 10.00	> 2.00
MAY 10,88	MAY 9,88	584.0	55.0	3.98		4.11	*****	0.1220	6.90	0.89
MAY 11,88	MAY 10,88	40.0	44.5	*****	UCR	4.32	*****	UCR 0.0864	5.15	1.15
MAY 13,88	MAY 12,88	434.0	24.0	D 4.55		4.69	*****	0.0479	D 3.25	0.70
MAY 14,88	MAY 13,88	76.0	11.5	*****		5.18	*****	0.0296	1.75	0.24
MAY 16,88	MAY 15,88	1971.0	26.5	4.30		4.40	*****	0.0668	3.10	0.49
MAY 17,88	MAY 16,88	384.0	22.5	4.31		4.42	*****	0.0633	2.75	0.20
MAY 20,88	MAY 19,88	106.0	7.0	4.80		4.91	*****	0.0296	0.65	0.21
MAY 22,88	MAY 20,88	1016.0	LG 3.0	5.11		5.30	*****	0.0198	<T 0.15	0.08
MAY 27,88	MAY 26,88	1.0	*****	*****		*****	*****	*****	*****	*****
JUN 2,88	JUN 1,88	38.0	41.0	*****		4.12	*****	0.1040	5.00	0.21
JUN 7,88	JUN 6,88	14.0	7.0	*****	UG	5.65	*****	0.0170	0.85	0.10
JUN 22,88	JUN 21,88	927.0	16.0	*****		4.78	*****	0.0405	2.15	0.44
JUN 26,88	JUN 25,88	536.0	40.0	4.18		4.23	*****	0.0950	4.45	0.66
JUN 29,88	JUN 28,88	481.0	9.0	4.78		4.78	*****	D 0.0750	0.88	<T 0.04
JUL 1,88	JUN 30,88	58.0	17.5	*****		4.54	*****	0.0500	1.85	0.12
JUL 11,88	JUL 10,88	580.0	19.5	4.32		4.54	*****	0.0485	1.90	0.27
JUL 12,88	JUL 11,88	15.0	9.0	*****	UG	6.06	*****	D 0.0178	0.60	0.16
JUL 14,88	JUL 13,88	533.0	33.5	4.20		4.36	*****	0.0703	3.75	0.50
JUL 16,88	JUL 15,88	68.0	34.5	4.19		4.31	*****	0.0739	3.30	0.73
JUL 19,88	JUL 18,88	8.0	13.0	*****		5.32	*****	0.0245	1.10	0.50
JUL 21,88	JUL 20,88	5.0	*****	*****		*****	*****	*****	*****	*****
JUL 23,88	JUL 22,88	30.0	16.0	*****		4.69	*****	0.0438	1.20	0.41
JUL 25,88	JUL 24,88	413.0	11.0	4.37		4.68	*****	0.0472	1.00	0.23
JUL 26,88	JUL 25,88	15.0	*****	*****		*****	*****	*****	*****	*****
JUL 27,88	JUL 26,88	4.0	*****	*****		*****	*****	*****	*****	*****
JUL 28,88	JUL 27,88	5.0	LG 3.0	*****	UG	6.03	*****	0.0192	LG 0.25	LG 0.06
AUG 5,88	AUG 4,88	25.0	39.0	*****		4.29	*****	0.0734	3.75	1.36
AUG 6,88	AUG 5,88	875.0	85.5	3.81		3.80	*****	0.1970	9.60	0.90
AUG 9,88	AUG 8,88	650.0	36.0	4.08		4.19	*****	0.0919	3.30	0.60
AUG 10,88	AUG 9,88	1077.0	23.5	4.23		4.39	*****	0.0653	2.40	0.32
AUG 12,88	AUG 11,88	272.0	19.5	4.28		4.36	*****	0.0700	2.15	0.28
AUG 15,88	AUG 14,88	546.0	18.0	D 4.39		4.54	*****	0.0546	2.45	0.39
AUG 17,88	AUG 16,88	*****	*****	*****		*****	*****	*****	*****	*****
AUG 18,88	AUG 17,88	358.0	D 5.0	D 4.74		4.79	*****	0.0366	0.95	0.21
AUG 21,88	AUG 20,88	8.0	5.0	*****	D	4.95	*****	0.0308	0.85	LG 0.05
AUG 24,88	AUG 23,88	103.0	55.5	3.89		3.89	*****	0.1660	4.80	1.01
AUG 25,88	AUG 24,88	1016.0	10.0	4.55		4.65	*****	0.0501	1.10	0.17

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REMOVAL DATE	EXPOSURE DATE	CALCIUM MG/L	CHLORIDE MG/L	MAGNESIM MG/L	POTASSIM MG/L	SODIUM MG/L	AMMONIUM AS N MG/L	FREE H+ LAB MG/L
APR 26,88	APR 22,88	0.46	0.17	0.060	0.085	0.060	0.530	UCR 0.0501
APR 30,88	APR 26,88	0.12	0.12	<T 0.015	<T 0.015	<T 0.020	0.240	0.0398
MAY 9,88	MAY 8,88	2.06	D 0.63	0.275	UG 0.310	0.150	1.100	UCR 0.2291
MAY 10,88	MAY 9,88	0.84	0.38	0.105	0.150	0.110	0.900	0.0776
MAY 11,88	MAY 10,88	0.34	D 0.66	0.045	0.085	B 0.330	1.600	UCR 0.0479
MAY 13,88	MAY 12,88	D 0.72	D 0.15	D 0.125	0.100	D 0.055	0.730	0.0204
MAY 14,88	MAY 13,88	0.30	0.17	0.045	D 0.140	D 0.135	0.370	0.0066
MAY 16,88	MAY 15,88	0.40	0.08	0.045	<T 0.020	<T 0.010	0.570	0.0398
MAY 17,88	MAY 16,88	0.22	<T 0.04	0.030	0.045	0.025	0.210	0.0380
MAY 20,88	MAY 19,88	<T 0.08	<T 0.03	<T 0.015	0.050	<T 0.025	0.082	0.0123
MAY 22,88	MAY 20,88	<W 0.02	<T 0.03	<W 0.005	<T 0.010	<W 0.005	<T 0.006	0.0050
MAY 27,88	MAY 26,88	*****	*****	*****	*****	*****	*****	*****
JUN 2,88	JUN 1,88	!IS *****	0.14	!IS *****	!IS *****	!IS *****	0.216	0.0759
JUN 7,88	JUN 6,88	!IS *****	0.11	!IS *****	!IS *****	!IS *****	<T 0.008	UG 0.0022
JUN 22,88	JUN 21,88	0.42	0.08	0.070	0.115	0.035	0.470	0.0166
JUN 26,88	JUN 25,88	0.50	0.16	0.075	0.060	0.030	0.588	0.0589
JUN 29,88	JUN 28,88	<T 0.02	<T 0.03	<W 0.005	<T 0.015	<T 0.010	<T 0.018	0.0166
JUL 1,88	JUN 30,88	0.12	0.10	<T 0.015	0.080	0.040	0.114	0.0288
JUL 11,88	JUL 10,88	0.16	0.11	0.035	0.120	0.040	0.238	0.0288
JUL 12,88	JUL 11,88	!IS *****	0.14	!IS *****	!IS *****	!IS *****	!IS *****	UG 0.0009
JUL 14,88	JUL 13,88	0.26	0.09	0.065	<T 0.020	<T 0.010	0.608	0.0437
JUL 16,88	JUL 15,88	D 0.60	0.14	0.110	0.110	0.070	0.392	0.0490
JUL 19,88	JUL 18,88	!IS *****	0.13	!IS *****	!IS *****	!IS *****	0.560	0.0048
JUL 21,88	JUL 20,88	*****	*****	*****	*****	*****	*****	*****
JUL 23,88	JUL 22,88	!IS *****	0.16	!IS *****	!IS *****	!IS *****	0.304	0.0204
JUL 25,88	JUL 24,88	<T 0.04	0.07	<T 0.010	<T 0.025	<T 0.025	0.200	0.0209
JUL 26,88	JUL 25,88	*****	*****	*****	*****	*****	*****	*****
JUL 27,88	JUL 26,88	*****	*****	*****	*****	*****	*****	*****
JUL 28,88	JUL 27,88	!IS *****	0.17	!IS *****	!IS *****	!IS *****	0.110	UG 0.0009
AUG 5,88	AUG 4,88	!IS *****	0.28	!IS *****	!IS *****	!IS *****	0.304	0.0513
AUG 6,88	AUG 5,88	0.56	0.18	0.085	0.035	<T 0.025	0.772	0.1585
AUG 9,88	AUG 8,88	0.34	0.12	0.070	0.035	0.025	0.190	0.0646
AUG 10,88	AUG 9,88	<T 0.06	0.05	<W 0.005	<T 0.015	<T 0.015	0.316	0.0407
AUG 12,88	AUG 11,88	<W 0.02	0.05	<T 0.010	<T 0.015	<T 0.010	0.146	0.0437
AUG 15,88	AUG 14,88	0.18	0.08	0.040	0.035	0.030	0.420	0.0288
AUG 17,88	AUG 16,88	*****	*****	*****	*****	*****	*****	*****
AUG 18,88	AUG 17,88	0.16	<T 0.04	<T 0.015	<T 0.020	<T 0.020	D 0.236	0.0162
AUG 21,88	AUG 20,88	!IS *****	0.15	!IS *****	!IS *****	!IS *****	0.046	D 0.0112
AUG 24,88	AUG 23,88	0.26	0.09	0.030	0.040	D 0.035	0.310	0.1288
AUG 25,88	AUG 24,88	<T 0.04	<T 0.01	<T 0.005	<T 0.015	0.025	0.160	0.0224

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REMOVAL DATE	EXPOSURE DATE	SAMPLING START/END HR. HR.	PRECIP START/END HR. HR.	SAMPLE TYPE 01-RAIN 02-SNOW 03-COMP/04-OTHER	GAUGE DEPTH(MM)	GAUGE TYPE 01-STD. 02-NIPHER	SAMPLE NUMBER	PROJECT CODE 02-APIOS 03-SPECIAL	SUBPROJECT CODE 01-MOE 03-AES	SAMPLER EFFICI- ENCY (%)	COMMENTS FIELD OFFICE
AUG 26,88	AUG 25,88	730 730	1300 1400	1	15.6	1	49703	2	1	99	HM
AUG 27,88	AUG 26,88	730 745	1000 1100	1	1.6	1	49706	2	1	70	
AUG 29,88	AUG 27,88	745 730	200 300	1	2.0	1	49707	2	1	96	Y2
AUG 30,88	AUG 29,88	730 730	1530 1600	1	2.0	1	49708	2	1	78	
AUG 31,88	AUG 30,88	730 720	1500 1630	1	3.8	1	49709	2	1	93	
SEP 4,88	SEP 3,88	800 810	2200 100	1	12.8	1	49710	2	1	101	
SEP 5,88	SEP 4,88	810 800	1530 1730	1	20.1	1	49711	2	1	91	
SEP 6,88	SEP 5,88	800 800	1500 1600	1	0.6	1	49712	2	1	54	
SEP 7,88	SEP 6,88	800 730	1800 1900	1	2.2	1	49713	2	1	84	JHM
SEP 13,88	SEP 12,88	730 730	2200 2400	1	4.4	1	49714	2	1	90	
SEP 15,88	SEP 14,88	730 730	730 830	1	1.0	1	49717	2	1	81	C
SEP 17,88	SEP 16,88	740 800	500 600	1	5.0	1	49716	2	1	96	M
SEP 21,88	SEP 20,88	730 800	730 930	1	23.6	1	49715	2	1	107	N
SEP 22,88	SEP 21,88	800 730	800 1000	1	0.6	1	49718	2	1	38	H
SEP 23,88	SEP 22,88	730 800	530 730	1	6.6	1	49719	2	1	114	
SEP 27,88	SEP 26,88	730 745	1500 1600	1	1.2	1	49720	2	1	62	C
SEP 28,88	SEP 27,88	745 730	1230 1330	1	3.2	1	49721	2	1	93	JHM
OCT 3,88	OCT 1,88	730 740	1900 2100	1	30.5	1	49722	2	1	143	NY2
OCT 5,88	OCT 4,88	740 745	530 745	1	26.6	1	49723	2	1	99	N
OCT 6,88	OCT 5,88	745 745	745 945	1	2.8	1	49724	2	1	53	HCM
OCT 8,88	OCT 7,88	745 800	1515 1715	1	8.2	1	49725	2	1	84	HC
OCT 9,88	OCT 8,88	800 800	900 1000	1	0.4	1	49726	2	1	****	N
OCT 11,88	OCT 10,88	800 745	1130 1330	1	9.6	1	49727	2	1	91	
OCT 12,88	OCT 11,88	800 745	1300 1500	3	1.8	1	49728	2	1	79	C
OCT 17,88	OCT 16,88	800 720	500 600	1	2.4	1	49730	2	1	105	H
OCT 18,88	OCT 17,88	720 720	2130 100	1	25.6	1	49731	2	1	91	NM
OCT 20,88	OCT 19,88	710 710	300 400	1	0.4	1	49732	2	1	****	N
OCT 22,88	OCT 21,88	715 900	730 900	1	5.2	1	49734	2	1	99	E
OCT 23,88	OCT 22,88	900 900	1400 1600	1	0.2	1	49735	2	1	****	E
OCT 24,88	OCT 23,88	900 730	500 730	1	5.8	1	49736	2	1	64	N
OCT 25,88	OCT 24,88	730 730	400 600	1	10.2	1	49737	2	1	95	
OCT 26,88	OCT 25,88	730 730	****	1	****	2	49742	2	1	****	Q
OCT 28,88	OCT 26,88	730 900	530 645	1	19.6	2	49738	2	1	121	Q
OCT 29,88	OCT 28,88	900 900	100 300	1	6.2	2	49739	2	1	77	NY2
NOV 2,88	NOV 1,88	700 700	1500 1600	1	0.2	2	49741	2	1	202	N
NOV 4,88	NOV 3,88	730 720	400 500	1	2.2	2	49743	2	1	136	NJCH
NOV 5,88	NOV 4,88	720 900	2300 2300	1	6.0	2	49744	2	1	115	
NOV 7,88	NOV 5,88	700 710	900 1100	3	15.8	2	49745	2	1	106	NCMZ
NOV 9,88	NOV 8,88	740 730	1100 1300	1	1.2	2	49747	2	1	149	N
NOV 11,88	NOV 9,88	730 730	600 730	3	15.0	2	49748	2	1	U 133	P Z

ONTARIO MINISTRY OF THE ENVIRONMENT
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REMOVAL DATE	EXPOSURE DATE	VOLUME ML	CONDUCT. UMHO/CM	PH FIELD	PH LAB	TOTAL H+ TO PH8.3 MG/L	TOTAL H+ GRAN MG/L	SULPHATE MG/L	NITRATE AS N MG/L
AUG 26,88	AUG 25,88	994.0	3.5	UG	5.13	5.29	*****	0.0258	0.45
AUG 27,88	AUG 26,88	72.0	5.5	*****	4.93	*****	0.0312	0.85	<T
AUG 29,88	AUG 27,88	124.0	69.0	3.83	3.89	*****	0.1920	6.25	1.45
AUG 30,88	AUG 29,88	100.0	9.0	4.64	4.82	*****	0.0388	0.95	0.23
AUG 31,88	AUG 30,88	228.0	7.0	4.66	4.85	*****	0.0345	0.70	0.09
SEP 4,88	SEP 3,88	829.0	32.0	4.05	4.16	*****	0.1050	3.90	0.20
SEP 5,88	SEP 4,88	1174.0	18.5	4.27	4.34	*****	0.0695	2.20	LG
SEP 6,88	SEP 5,88	21.0	2.5	*****	!IS	*****	!IS	0.35	0.07
SEP 7,88	SEP 6,88	119.0	3.0	4.86	5.45	*****	0.0238	<T	<T
SEP 13,88	SEP 12,88	256.0	41.0	4.04	4.13	*****	0.1110	5.15	0.78
SEP 15,88	SEP 14,88	52.0	22.0	*****	4.42	*****	0.0656	3.45	0.17
SEP 17,88	SEP 16,88	310.0	40.0	4.04	4.18	*****	0.1080	3.90	0.52
SEP 21,88	SEP 20,88	1633.0	24.0	4.30	4.29	*****	D	0.0822	2.50
SEP 22,88	SEP 21,88	15.0	3.5	*****	5.31	*****	0.0246	0.60	<T
SEP 23,88	SEP 22,88	484.0	54.0	3.89	3.93	*****	0.1590	4.65	1.04
SEP 27,88	SEP 26,88	48.0	15.0	*****	UG	6.04	*****	0.0266	2.30
SEP 28,88	SEP 27,88	191.0	24.5	UG	5.48	UG	7.51	*****	0.0216
OCT 3,88	OCT 1,88	2804.0	11.0	4.59	4.71	*****	0.0439	1.60	0.22
OCT 5,88	OCT 4,88	1701.0	7.5	4.73	D	4.87	*****	0.0349	0.65
OCT 6,88	OCT 5,88	96.0	2.0	UG	5.12	5.30	*****	0.0269	LG
OCT 8,88	OCT 7,88	446.0	4.0	5.02	5.12	*****	0.0301	0.80	0.11
OCT 9,88	OCT 8,88	*****	*****	*****	*****	*****	*****	*****	*****
OCT 11,88	OCT 10,88	565.0	15.0	4.51	4.56	*****	0.0504	2.10	0.45
OCT 12,88	OCT 11,88	92.0	9.0	*****	4.51	*****	0.0540	1.45	<T
OCT 17,88	OCT 16,88	163.0	32.0	4.42	4.29	*****	0.0761	3.80	0.90
OCT 18,88	OCT 17,88	1501.0	28.5	4.31	D	4.12	*****	D	0.1010
OCT 20,88	OCT 19,88	*****	*****	*****	*****	*****	*****	*****	*****
OCT 22,88	OCT 21,88	330.0	41.0	4.17	4.14	*****	0.0987	2.15	1.02
OCT 23,88	OCT 22,88	*****	*****	*****	*****	*****	*****	*****	*****
OCT 24,88	OCT 23,88	238.0	37.0	4.18	4.13	*****	0.1040	1.65	0.87
OCT 25,88	OCT 24,88	622.0	10.0	4.80	4.79	*****	0.0388	0.85	0.27
OCT 26,88	OCT 25,88	230.0	6.0	UG	5.21	4.88	*****	0.0350	0.45
OCT 28,88	OCT 26,88	1521.0	26.5	4.35	4.28	*****	0.0730	1.90	0.49
OCT 29,88	OCT 28,88	307.0	10.0	4.83	4.85	*****	0.0364	1.65	0.07
NOV 2,88	NOV 1,88	26.0	63.5	*****	4.06	*****	0.1140	3.60	!IS
NOV 4,88	NOV 3,88	193.0	32.5	4.23	3.99	*****	D	0.1340	3.20
NOV 5,88	NOV 4,88	443.0	33.0	4.16	4.07	*****	0.1130	3.10	0.56
NOV 7,88	NOV 5,88	1080.0	6.0	4.85	4.67	*****	0.0418	0.70	0.13
NOV 9,88	NOV 8,88	115.0	30.0	4.25	4.12	*****	0.1050	2.35	0.80
NOV 11,88	NOV 9,88	1288.0	31.0	4.20	4.11	*****	0.1040	3.15	0.52

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REMOVAL DATE	EXPOSURE DATE		CALCIUM MG/L	CHLORIDE MG/L	MAGNESIUM MG/L	POTASSIUM MG/L	SODIUM MG/L	AMMONIUM AS N MG/L	FREE H+ LAB MG/L
AUG 26,88	AUG 25,88	<T	0.06	<W 0.01	<T 0.010	<T 0.010	<T 0.015	0.120	0.0051
AUG 27,88	AUG 26,88	<T	0.06	<T 0.05	<T 0.005	0.035	0.035	0.056	0.0117
AUG 29,88	AUG 27,88		0.52	0.33	0.100	0.125	0.065	0.950	0.1268
AUG 30,88	AUG 29,88		0.14	0.06	<T 0.025	0.035	0.025	0.210	0.0151
AUG 31,88	AUG 30,88	<T	0.04	<T 0.05	<W 0.005	<T 0.015	<T 0.015	0.066	0.0141
SEP 4,88	SEP 3,88	<T	0.06	<T 0.03	<T 0.005	<T 0.015	<T 0.010	0.260	0.0692
SEP 5,88	SEP 4,88	<W	0.02	<W 0.01	<W 0.005	<T 0.015	<T 0.005	0.090	0.0457
SEP 6,88	SEP 5,88	<T	0.08	0.13	<T 0.015	0.050	0.105	0.096	!IS *****
SEP 7,88	SEP 6,88	<T	0.10	<T 0.04	<T 0.010	<T 0.015	<T 0.025	0.076	0.0035
SEP 13,88	SEP 12,88		0.26	0.10	0.045	0.040	0.050	0.856	0.0741
SEP 15,88	SEP 14,88		0.22	<W 0.01	D 0.045	D 0.235	D 0.055	0.296	0.0380
SEP 17,88	SEP 16,88		0.14	0.17	<T 0.020	<T 0.025	0.025	0.186	0.0661
SEP 21,88	SEP 20,88	<T	0.08	0.38	<T 0.015	0.025	<T 0.020	0.266	0.0513
SEP 22,88	SEP 21,88	<T	0.08	<T 0.05	<T 0.005	0.055	0.035	0.110	0.0049
SEP 23,88	SEP 22,88		0.16	0.22	<T 0.020	0.030	0.045	0.540	0.1175
SEP 27,88	SEP 26,88		0.70	0.26	0.080	0.195	0.135	0.806	UG 0.0009
SEP 28,88	SEP 27,88		2.10	0.18	0.250	0.115	0.050	1.170	UG 0.0000
OCT 3,88	OCT 1,88		0.16	0.08	0.025	<T 0.015	0.050	0.280	0.0195
OCT 5,88	OCT 4,88	<W	0.02	<T 0.04	<T 0.005	<T 0.015	<T 0.025	0.116	D 0.0135
OCT 6,88	OCT 5,88	<T	0.04	<W 0.01	<W 0.005	0.070	0.035	0.120	0.0050
OCT 8,88	OCT 7,88	<T	0.04	<W 0.01	<W 0.005	0.035	<T 0.025	0.256	0.0076
OCT 9,88	OCT 8,88		*****	*****	*****	*****	*****	*****	*****
OCT 11,88	OCT 10,88		0.10	<W 0.01	<W 0.005	0.035	<T 0.015	0.590	0.0275
OCT 12,88	OCT 11,88	<T	0.04	<W 0.01	<W 0.005	0.040	0.025	0.056	0.0309
OCT 17,88	OCT 16,88		0.24	0.12	0.030	0.075	0.050	1.320	0.0513
OCT 18,88	OCT 17,88	<T	0.06	0.06	<W 0.005	<T 0.020	<T 0.010	0.310	D 0.0759
OCT 20,88	OCT 19,88		*****	*****	*****	*****	*****	*****	*****
OCT 22,88	OCT 21,88		0.18	0.24	<T 0.020	D 0.115	D 0.050	0.366	0.0724
OCT 23,88	OCT 22,88		*****	*****	*****	*****	*****	*****	*****
OCT 24,88	OCT 23,88	<T	0.06	0.10	<W 0.005	0.040	<T 0.025	0.200	0.0741
OCT 25,88	OCT 24,88		0.14	0.07	<T 0.010	0.030	0.035	0.150	0.0162
OCT 26,88	OCT 25,88	<T	0.06	0.10	<W 0.005	0.060	D 0.050	<T 0.006	0.0132
OCT 28,88	OCT 26,88		0.10	0.16	<T 0.010	<T 0.025	<W 0.005	0.186	0.0525
OCT 29,88	OCT 28,88	<T	0.08	0.06	<T 0.010	0.050	<T 0.020	0.276	0.0141
NOV 2,88	NOV 1,88		2.34	0.72	0.255	0.095	0.185	0.606	0.0871
NOV 4,88	NOV 3,88		0.20	0.16	<T 0.020	0.040	0.025	0.170	0.1023
NOV 5,88	NOV 4,88		0.16	0.33	0.030	0.040	0.155	0.216	0.0851
NOV 7,88	NOV 5,88	<T	0.04	0.09	<T 0.010	<T 0.010	0.035	0.086	0.0214
NOV 9,88	NOV 8,88		0.14	0.22	<T 0.010	<T 0.020	<T 0.015	0.460	0.0759
NOV 11,88	NOV 9,88		0.16	0.23	0.025	0.025	0.125	0.330	0.0776

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : NITHGROVE/DAILY/AEROCHEM

#07

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REMOVAL DATE	EXPOSURE DATE	SAMPLING START/END HR. HR.	PRECIP START/END HR. HR.	SAMPLE TYPE 01-RAIN 02-SNOW 03-COMP/04-OTHER	GAUGE DEPTH(MM)	GAUGE TYPE 01-STD. 02-NIPHER	SAMPLE NUMBER	PROJECT CODE 02-APIOS 03-SPECIAL	SUBPROJECT CODE 01-MOE 03-AES	SAMPLER EFFICI- ENCY (%)	COMMENTS FIELD OFFICE
NOV 14,88	NOV 13,88	800 730	800 1200	1	17.2	2	49749	2	1	106	N
NOV 15,88	NOV 14,88	730 730	1400 1500	1	0.4	2	49752	2	1	62	NHCH
NOV 17,88	NOV 16,88	730 730	1200 1400	1	1.8	2	49753	2	1	218	N
NOV 18,88	NOV 17,88	730 730	100 300	2	4.2	2	49754	2	1	83	C
NOV 20,88	NOV 19,88	800 900	1400 1600	3	0.2	2	49755	2	1	101	N
NOV 21,88	NOV 20,88	900 720	1100 1500	3	7.0	2	49756	2	1	113	
NOV 27,88	NOV 26,88	730 900	1730 1900	1	3.0	2	49758	2	1	152	N
NOV 28,88	NOV 27,88	900 800	500 600	3	0.2	2	49759	2	1	257	N
NOV 29,88	NOV 28,88	800 730	1105 1345	2	2.2	2	49760	2	1	97	
NOV 30,88	NOV 29,88	730 800	600 800	2	2.2	2	49761	2	1	88	
DEC 1,88	NOV 30,88	800 800	800 1100	2	4.2	2	49762	2	1	103	
DEC 2,88	DEC 1,88	800 800	500 700	2	0.2	2	49763	2	1	109	
DEC 4,88	DEC 3,88	800 800	400 600	2	****	2	49764	2	1	****	
DEC 9,88	DEC 8,88	800 800	300 600	2	5.0	2	49766	2	1	82	HCM
DEC 13,88	DEC 12,88	800 800	2300 800	2	1.0	2	49767	2	1	37	
DEC 14,88	DEC 13,88	800 800	800 1700	2	0.6	2	49768	2	1	54	
DEC 15,88	DEC 14,88	800 800	1230 1800	2	4.8	2	49769	2	1	64	
DEC 17,88	DEC 16,88	800 800	900 1200	4	1.0	2	49771	2	1	104	QE
DEC 19,88	DEC 18,88	800 800	800 800	4	0.3	2	49772	2	1	109	Q
DEC 20,88	DEC 19,88	800 800	700 700	3	1.0	2	49773	2	1	135	Q
DEC 21,88	DEC 20,88	800 800	1000 1500	3	6.6	2	49774	2	1	109	Q
DEC 22,88	DEC 21,88	800 800	800 900	2	0.1	2	49775	2	1	****	EFJ
DEC 23,88	DEC 22,88	800 800	2200 2400	3	10.4	2	49776	2	1	U 54	FI
DEC 25,88	DEC 23,88	800 800	1630 1830	2	5.4	2	49777	2	1	U 99	FJ
DEC 26,88	DEC 25,88	800 800	****	2	****	2	49778	2	1	****	FJ
DEC 27,88	DEC 26,88	800 800	700 800	2	4.4	2	49779	2	1	U 63	FJ
DEC 28,88	DEC 27,88	800 800	800 1800	3	19.4	2	49780	2	1	U 105	FJ
DEC 29,88	DEC 28,88	800 800	1000 1400	2	0.4	2	49781	2	1	U 42	FJ
DEC 30,88	DEC 29,88	800 800	1600 1800	2	0.4	2	49782	2	1	U 148	FJ
DEC 31,88	DEC 30,88	800 800	200 600	2	1.4	2	49783	2	1	U 84	FJ

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : NITHGROVE/DAILY/AEROCHEN

#07

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REMOVAL DATE	EXPOSURE DATE	VOLUME ML	CONDUCT. UMHO/CM	PH FIELD	PH LAB	TOTAL H+ TO PH8.3 MG/L	TOTAL H+ GRAN MG/L	SULPHATE MG/L	NITRATE AS N MG/L
NOV 14,88	NOV 13,88	1176.0	22.0	4.35	4.29	*****	0.0763	1.85	0.49
NOV 15,88	NOV 14,88	16.0	8.0	*****	4.19	*****	0.0934	1.00	0.33
NOV 17,88	NOV 16,88	252.0	31.5	4.28	4.30	*****	0.0844	4.10	0.67
NOV 18,88	NOV 17,88	225.0	8.0	5.04	5.00	*****	0.0308	1.45	0.19
NOV 20,88	NOV 19,88	13.0	!IS *****	*****	5.14	*****	0.0244	1.10	0.15
NOV 21,88	NOV 20,88	508.0	10.0	4.67	4.68	*****	0.0428	1.15	0.21
NOV 27,88	NOV 26,88	293.0	40.0	4.08	4.06	*****	0.1230	3.70	0.61
NOV 28,88	NOV 27,88	33.0	!IS *****	*****	4.49	*****	0.0535	!IS *****	!IS *****
NOV 29,88	NOV 28,88	137.0	17.0	4.49	4.49	*****	0.0583	1.95	0.44
NOV 30,88	NOV 29,88	125.0	54.5	4.00	3.92	*****	0.1550	1.55	2.38
DEC 1,88	NOV 30,88	278.0	28.5	4.28	4.24	*****	0.0826	1.85	0.94
DEC 2,88	DEC 1,88	14.0	!IS *****	*****	5.07	*****	0.0260	!IS *****	!IS *****
DEC 4,88	DEC 3,88	8.0	!IS *****	*****	4.88	*****	0.0299	!IS *****	!IS *****
DEC 9,88	DEC 8,88	266.0	6.0	5.23	5.43	*****	0.0168	0.35	0.16
DEC 13,88	DEC 12,88	24.0	!IS *****	*****	4.44	*****	0.0571	0.35	0.53
DEC 14,88	DEC 13,88	21.0	!IS *****	*****	4.18	*****	0.0930	0.75	0.64
DEC 15,88	DEC 14,88	198.0	37.4	4.19	4.06	*****	0.1140	1.95	1.13
DEC 17,88	DEC 16,88	67.0	!IS *****	*****	4.05	*****	0.1170	0.50	1.64
DEC 19,88	DEC 18,88	21.0	!IS *****	*****	4.35	*****	0.0642	!IR *****	!IR *****
DEC 20,88	DEC 19,88	87.0	55.2	*****	4.03	*****	0.1250	5.70	1.04
DEC 21,88	DEC 20,88	463.0	27.9	4.32	4.40	*****	0.0804	2.75	0.39
DEC 22,88	DEC 21,88	*****	*****	*****	*****	*****	*****	*****	*****
DEC 23,88	DEC 22,88	364.0	9.0	4.61	4.65	*****	0.0422	0.90	0.34
DEC 25,88	DEC 23,88	345.0	11.0	4.61	4.64	*****	0.0437	1.05	0.50
DEC 26,88	DEC 25,88	6.0	LG 2.5	*****	5.22	*****	0.0324	0.55	!IR *****
DEC 27,88	DEC 26,88	180.0	LG 2.0	5.28	5.40	*****	0.0212	0.15	LG 0.07
DEC 28,88	DEC 27,88	1306.0	10.0	4.53	4.52	*****	0.0509	1.10	0.23
DEC 29,88	DEC 28,88	11.0	!IS *****	*****	4.63	*****	0.0473	!IS *****	!IS *****
DEC 30,88	DEC 29,88	38.0	!IS *****	*****	4.32	*****	0.0743	!IS *****	!IS *****
DEC 31,88	DEC 30,88	76.0	28.0	*****	4.31	*****	0.0735	2.75	1.75

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : NITHGROVE/DAILY/AEROCHEM

#07

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REMOVAL DATE	EXPOSURE DATE	CALCIUM MG/L	CHLORIDE MG/L	MAGNESIUM MG/L	POTASSIUM MG/L	SODIUM MG/L	AMMONIUM AS N MG/L	FREE H+ LAB MG/L
NOV 14,88	NOV 13,88	<T 0.08	0.10	<T 0.010	<T 0.010	<T 0.020	0.226	0.0513
NOV 15,88	NOV 14,88	0.20	0.08	0.030	0.050	0.030	0.200	0.0646
NOV 17,88	NOV 16,88	0.78	0.31	0.115	0.115	0.130	0.396	D 0.0501
NOV 18,88	NOV 17,88	0.10	0.06	<T 0.020	<T 0.015	<T 0.010	0.416	0.0100
NOV 20,88	NOV 19,88	!IS *****	0.10	!IS *****	!IS *****	!IS *****	0.080	0.0072
NOV 21,88	NOV 20,88	0.12	0.06	<T 0.010	<T 0.010	<T 0.020	0.110	0.0209
NOV 27,88	NOV 26,88	0.20	0.43	0.035	0.035	0.155	0.180	0.0871
NOV 28,88	NOV 27,88	!IS *****	!IS *****	!IS *****	!IS *****	!IS *****	1.200	0.0324
NOV 29,88	NOV 28,88	<T 0.04	D 0.06	<T 0.005	<T 0.020	<T 0.015	0.496	0.0324
NOV 30,88	NOV 29,88	0.86	0.58	0.070	0.070	0.075	0.330	0.1202
DEC 1,88	NOV 30,88	0.18	0.24	<T 0.020	0.060	0.045	0.326	0.0575
DEC 2,88	DEC 1,88	<T 0.06	!IS *****	<T 0.010	0.030	0.035	<T 0.020	0.0085
DEC 4,88	DEC 3,88	0.12	!IS *****	<T 0.020	0.030	0.050	0.096	0.0132
DEC 9,88	DEC 8,88	0.18	0.26	<T 0.020	0.025	0.045	0.026	0.0037
DEC 13,88	DEC 12,88	!IS *****	0.44	!IS *****	!IS *****	!IS *****	<T 0.020	0.0363
DEC 14,88	DEC 13,88	!IS *****	0.39	!IS *****	!IS *****	!IS *****	0.046	0.0661
DEC 15,88	DEC 14,88	0.38	0.74	0.035	0.065	0.115	0.486	0.0871
DEC 17,88	DEC 16,88	0.44	0.66	0.070	0.040	0.265	<T 0.020	0.0891
DEC 19,88	DEC 18,88	0.26	!IR *****	0.035	0.200	0.375	0.100	0.0447
DEC 20,88	DEC 19,88	1.12	0.59	0.105	0.105	0.285	0.306	0.0933
DEC 21,88	DEC 20,88	0.38	0.24	0.035	0.060	0.115	0.310	0.0398
DEC 22,88	DEC 21,88	*****	*****	*****	*****	*****	*****	*****
DEC 23,88	DEC 22,88	0.12	0.10	<T 0.015	<T 0.020	0.045	0.090	0.0224
DEC 25,88	DEC 23,88	0.20	0.21	<T 0.025	0.065	0.075	0.260	0.0229
DEC 26,88	DEC 25,88	<T 0.06	0.19	<T 0.015	0.105	0.140	0.026	0.0060
DEC 27,88	DEC 26,88	<T 0.02	D 0.35	<W 0.005	0.035	0.105	<T 0.016	0.0040
DEC 28,88	DEC 27,88	<W 0.02	0.10	<W 0.005	<T 0.020	0.025	0.100	0.0302
DEC 29,88	DEC 28,88	0.12	!IS *****	0.025	0.035	0.145	0.096	0.0234
DEC 30,88	DEC 29,88	0.26	!IS *****	0.035	0.025	0.180	<T 0.020	0.0479
DEC 31,88	DEC 30,88	1.50	0.85	0.220	0.050	0.460	0.540	0.0490

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : RAVEN LAKE/DAILY/AEROCHEM

#05

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REMOVAL DATE	EXPOSURE DATE	SAMPLING START/END HR. HR.	PRECIP START/END HR. HR.	SAMPLE TYPE 01-RAIN 02-SNOW 03-COMP/04-OTHER	GAUGE DEPTH(MM)	GAUGE TYPE 01-STD. 02-NIPHER	SAMPLE NUMBER	PROJECT CODE 02-APIOS 03-SPECIAL	SUBPROJECT CODE 01-MOE 03-AES	SAMPLER EFFICI- ENCY (%)	COMMENTS FIELD OFFICE
JAN 1,88	DEC 31,87	900 900	920 1030	2	0.6	2	48235	2	1	46	N
JAN 4,88	JAN 3,88	900 900	400 730	2	1.6	2	48238	2	1	38	N
JAN 5,88	JAN 4,88	900 900	1930 2300	2	5.0	2	48239	2	1	22	NHM
JAN 6,88	JAN 5,88	900 900	910 2300	2	3.8	2	48240	2	1	43	NHCM
JAN 10,88	JAN 9,88	900 910	1600 2200	2	0.6	2	48241	2	1	41	N
JAN 12,88	JAN 11,88	910 915	1200 1500	2	1.8	2	48242	2	1	34	N
JAN 13,88	JAN 12,88	915 900	200 430	2	1.1	2	48243	2	1	114	
JAN 15,88	JAN 14,88	900 900	400 900	2	0.8	2	48244	2	1	70	
JAN 16,88	JAN 15,88	900 900	900 2400	2	0.5	2	48245	2	1	****	E N
JAN 19,88	JAN 18,88	900 915	930 1600	1	0.6	2	48248	2	1	195	N
JAN 20,88	JAN 19,88	915 900	30 700	1	5.2	2	48249	2	1	83	
JAN 21,88	JAN 20,88	900 910	2230 300	2	1.2	2	48250	2	1	107	
JAN 23,88	JAN 22,88	900 900	430 900	2	0.4	2	48252	2	1	89	
JAN 24,88	JAN 23,88	900 900	500 900	2	1.6	2	48253	2	1	72	
JAN 25,88	JAN 24,88	900 900	900 1430	2	3.8	2	48254	2	1	70	
JAN 29,88	JAN 28,88	900 900	900 1120	2	0.2	2	48257	2	1	15	XN
JAN 31,88	JAN 30,88	900 915	1240 1500	1	0.4	2	48258	2	1	1716	NJ
FEB 1,88	JAN 31,88	915 900	1300 2115	1	6.4	2	48259	2	1	118	
FEB 2,88	FEB 1,88	900 900	1630 500	2	11.0	2	48260	2	1	77	M
FEB 4,88	FEB 3,88	900 900	1030 200	2	2.3	2	48262	2	1	71	
FEB 6,88	FEB 5,88	900 900	1600 2330	2	0.3	2	48263	2	1	****	E N
FEB 7,88	FEB 6,88	900 900	1000 1100	2	0.4	2	48264	2	1	****	E N
FEB 8,88	FEB 7,88	900 900	1330 200	2	1.4	2	48265	2	1	13	N
FEB 9,88	FEB 8,88	900 900	500 900	2	1.3	2	48266	2	1	40	XN
FEB 10,88	FEB 9,88	900 900	1930 2400	2	1.6	2	48267	2	1	38	XN
FEB 12,88	FEB 11,88	900 900	1630 200	2	7.6	2	48268	2	1	U 0	F X
FEB 13,88	FEB 12,88	900 910	1700 100	2	3.0	2	48269	2	1	11	N
FEB 15,88	FEB 14,88	900 900	2320 900	1	5.4	2	48270	2	1	102	
FEB 17,88	FEB 16,88	900 900	2100 100	2	1.4	2	48272	2	1	80	
FEB 20,88	FEB 19,88	900 900	1500 200	2	14.6	2	48274	2	1	56	
FEB 21,88	FEB 20,88	900 900	1430 100	2	5.6	2	48275	2	1	61	
FEB 23,88	FEB 22,88	900 900	1800 2030	3	0.4	2	48276	2	1	222	NH
FEB 24,88	FEB 23,88	900 900	2230 100	2	1.2	2	48277	2	1	31	NH
FEB 25,88	FEB 24,88	900 900	2130 2330	2	0.4	2	48278	2	1	39	NHCM
FEB 27,88	FEB 26,88	900 900	1700 2400	2	2.4	2	48280	2	1	39	N
FEB 29,88	FEB 28,88	900 900	2200 300	2	4.6	2	48281	2	1	64	
MAR 2,88	MAR 1,88	900 900	300 600	2	1.4	2	48283	2	1	42	N
MAR 9,88	MAR 8,88	900 830	530 830	1	0.6	2	48286	2	1	184	N
MAR 10,88	MAR 9,88	830 900	830 1200	1	0.2	2	48287	2	1	124	N
MAR 13,88	MAR 12,88	900 900	1430 1730	3	4.6	2	48288	2	1	85	

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : RAVEN LAKE/DAILY/AEROCHEM				#05	PAGE : 2					
REMOVAL DATE	EXPOSURE DATE	VOLUME ML	CONDUCT. UMHO/CM	PH FIELD	PH LAB	TOTAL H+ TO PH8.3 MG/L	TOTAL H+ GRAN MG/L	SULPHATE MG/L	NITRATE AS N MG/L	
JAN 1,88	DEC 31,87	18.0	22.0	*****	4.49	*****	0.0589	2.35	0.49	
JAN 4,88	JAN 3,88	40.0	24.0	*****	4.41	*****	0.0678	0.70	1.18	
JAN 5,88	JAN 4,88	72.0	LG 2.5	*****	UG 6.81	*****	0.0146	0.30	0.11	
JAN 6,88	JAN 5,88	107.0	<T 0.5	*****	UG 5.84	*****	0.0165	<T 0.15	<T 0.03	
JAN 10,88	JAN 9,88	16.0	5.0	*****	UG 5.86	*****	0.0174	0.30	0.14	
JAN 12,88	JAN 11,88	40.0	!IS *****	*****	5.41	*****	0.0204	0.55	0.85	
JAN 13,88	JAN 12,88	81.0	D 46.5	*****	D 4.09	*****	0.1080	3.50	1.21	
JAN 15,88	JAN 14,88	36.0	!IS *****	*****	4.18	*****	0.0806	0.35	0.91	
JAN 16,88	JAN 15,88	*****	*****	*****	*****	*****	*****	*****	*****	
JAN 19,88	JAN 18,88	75.0	59.5	*****	3.85	*****	0.1590	2.75	1.41	
JAN 20,88	JAN 19,88	278.0	18.0	4.48	4.49	*****	0.0498	1.25	!CR *****	
JAN 21,88	JAN 20,88	83.0	54.5	*****	4.03	*****	D 0.1390	3.45	1.45	
JAN 23,88	JAN 22,88	23.0	34.0	*****	4.26	*****	0.0867	1.20	1.26	
JAN 24,88	JAN 23,88	74.0	39.0	*****	4.12	*****	0.1130	1.15	1.12	
JAN 25,88	JAN 24,88	171.0	31.5	*****	4.19	*****	0.0951	D 1.75	0.75	
JAN 29,88	JAN 28,88	2.0	*****	*****	*****	*****	*****	*****	*****	
JAN 31,88	JAN 30,88	440.0	> 100.0	4.30	3.91	*****	0.1850	B 12.40	2.63	
FEB 1,88	JAN 31,88	485.0	27.0	4.24	4.36	*****	0.0719	2.90	0.33	
FEB 2,88	FEB 1,88	547.0	5.0	4.81	4.96	*****	0.0325	0.60	0.12	
FEB 4,88	FEB 3,88	106.0	13.0	4.53	4.54	*****	0.0511	0.25	0.46	
FEB 6,88	FEB 5,88	*****	*****	*****	*****	*****	*****	*****	*****	
FEB 7,88	FEB 6,88	*****	*****	*****	*****	*****	*****	*****	*****	
FEB 8,88	FEB 7,88	12.0	*****	*****	*****	*****	*****	*****	*****	
FEB 9,88	FEB 8,88	34.0	*****	*****	*****	*****	*****	*****	*****	
FEB 10,88	FEB 9,88	40.0	*****	*****	*****	*****	*****	*****	*****	
FEB 12,88	FEB 11,88	4.0	*****	*****	*****	*****	*****	*****	*****	
FEB 13,88	FEB 12,88	22.0	!IS *****	*****	!IR *****	*****	!IR *****	!IS *****	!IS *****	
FEB 15,88	FEB 14,88	356.0	46.0	4.02	4.01	*****	0.1390	3.20	0.84	
FEB 17,88	FEB 16,88	72.0	16.5	*****	4.84	*****	0.0418	1.40	0.76	
FEB 20,88	FEB 19,88	526.0	22.0	4.31	4.33	*****	0.0752	1.00	0.64	
FEB 21,88	FEB 20,88	219.0	25.5	4.30	4.34	*****	0.0768	1.45	0.78	
FEB 23,88	FEB 22,88	57.0	D 45.0	*****	UG 7.21	*****	0.0221	D 6.15	2.42	
FEB 24,88	FEB 23,88	24.0	LG 3.0	*****	UG 6.14	*****	0.0194	0.40	0.17	
FEB 25,88	FEB 24,88	10.0	LG 1.0	*****	B 6.55	*****	D 0.0159	0.25	LG 0.05	
FEB 27,88	FEB 26,88	60.0	26.5	*****	4.43	*****	0.0707	0.95	1.15	
FEB 29,88	FEB 28,88	190.0	30.0	4.32	4.29	*****	0.0851	1.25	1.14	
MAR 2,88	MAR 1,88	38.0	28.5	*****	4.51	*****	0.0563	1.25	1.32	
MAR 9,88	MAR 8,88	71.0	69.0	*****	3.95	*****	0.1610	5.80	1.33	
MAR 10,88	MAR 9,88	16.0	23.0	*****	UG 6.09	*****	0.0226	4.00	0.82	
MAR 13,88	MAR 12,88	252.0	44.0	4.18	4.21	*****	0.0989	4.00	0.99	

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
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STATION NAME : RAVEN LAKE/DAILY/AEROCHEM

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REMOVAL DATE	EXPOSURE DATE	CALCIUM MG/L	CHLORIDE MG/L	MAGNESIUM MG/L	POTASSIUM MG/L	SODIUM MG/L	AMMONIUM AS N MG/L	FREE H+ LAB MG/L
JAN 1,88	DEC 31,87	0.24	0.43	0.025	0.030	0.190	0.475	0.0324
JAN 4,88	JAN 3,88	0.80	0.44	0.120	<T 0.015	0.145	0.030	0.0389
JAN 5,88	JAN 4,88	0.42	0.13	0.045	<T 0.010	0.055	<T 0.005	UG 0.0002
JAN 6,88	JAN 5,88	<T 0.06	0.08	<T 0.005	<T 0.005	<T 0.020	<T 0.005	UG 0.0014
JAN 10,88	JAN 9,88	!IS *****	0.25	!IS *****	!IS *****	!IS *****	<T 0.010	UG 0.0014
JAN 12,88	JAN 11,88	!IS *****	0.48	!IS *****	!IS *****	!IS *****	<T 0.020	0.0039
JAN 13,88	JAN 12,88	D 0.40	0.25	0.040	0.045	0.095	0.950	D 0.0813
JAN 15,88	JAN 14,88	!IS *****	0.54	!IS *****	!IS *****	!IS *****	<T 0.025	0.0661
JAN 16,88	JAN 15,88	*****	*****	*****	*****	*****	*****	*****
JAN 19,88	JAN 18,88	<T 0.04	0.15	<T 0.005	<T 0.020	0.040	0.410	0.1413
JAN 20,88	JAN 19,88	<T 0.04	0.07	<T 0.005	<T 0.010	0.030	D 0.115	0.0324
JAN 21,88	JAN 20,88	0.18	0.18	0.030	0.030	0.080	0.750	0.0933
JAN 23,88	JAN 22,88	!IS *****	0.41	!IS *****	!IS *****	!IS *****	0.240	0.0550
JAN 24,88	JAN 23,88	0.10	0.28	<T 0.015	<T 0.010	0.045	0.240	0.0759
JAN 25,88	JAN 24,88	D 0.14	0.29	<T 0.020	<T 0.010	0.060	0.240	0.0646
JAN 29,88	JAN 28,88	*****	*****	*****	*****	*****	*****	*****
JAN 31,88	JAN 30,88	B 2.90	B 1.72	D 0.295	UG 0.235	B 1.310	1.980	0.1230
FEB 1,88	JAN 31,88	0.20	D 0.67	D 0.060	0.035	D 0.420	0.320	0.0437
FEB 2,88	FEB 1,88	<W 0.02	<W 0.01	<T 0.005	<T 0.005	<T 0.020	0.050	0.0110
FEB 4,88	FEB 3,88	<T 0.02	0.11	<T 0.005	<T 0.005	<T 0.025	<T 0.020	0.0288
FEB 6,88	FEB 5,88	*****	*****	*****	*****	*****	*****	*****
FEB 7,88	FEB 6,88	*****	*****	*****	*****	*****	*****	*****
FEB 8,88	FEB 7,88	*****	*****	*****	*****	*****	*****	*****
FEB 9,88	FEB 8,88	*****	*****	*****	*****	*****	*****	*****
FEB 10,88	FEB 9,88	*****	*****	*****	*****	*****	*****	*****
FEB 12,88	FEB 11,88	*****	*****	*****	*****	*****	*****	*****
FEB 13,88	FEB 12,88	0.26	!IS *****	0.030	0.045	0.320	0.640	!IR *****
FEB 15,88	FEB 14,88	0.14	0.29	<T 0.025	0.025	0.130	0.320	0.0977
FEB 17,88	FEB 16,88	D 0.76	0.28	0.070	0.035	0.195	0.290	0.0145
FEB 20,88	FEB 19,88	0.10	0.05	<T 0.010	<T 0.005	<T 0.025	0.140	0.0468
FEB 21,88	FEB 20,88	<T 0.10	0.14	<T 0.010	<T 0.005	0.040	0.410	0.0457
FEB 23,88	FEB 22,88	UG 3.16	1.01	0.430	D 0.210	B 0.710	1.780	UG 0.0001
FEB 24,88	FEB 23,88	0.24	0.17	0.040	<T 0.010	0.080	0.090	UG 0.0007
FEB 25,88	FEB 24,88	<T 0.10	<T 0.03	<T 0.010	<T 0.005	0.030	0.050	B 0.0003
FEB 27,88	FEB 26,88	0.96	0.83	0.125	<T 0.020	0.225	0.320	0.0372
FEB 29,88	FEB 28,88	0.28	0.24	0.030	<T 0.015	0.125	0.450	0.0513
MAR 2,88	MAR 1,88	!IS *****	0.36	!IS *****	!IS *****	!IS *****	0.630	0.0309
MAR 9,88	MAR 8,88	0.66	0.27	0.065	0.060	0.120	0.760	0.1122
MAR 10,88	MAR 9,88	!IS *****	0.23	!IS *****	!IS *****	!IS *****	1.140	UG 0.0008
MAR 13,88	MAR 12,88	0.54	0.21	0.055	0.050	0.100	0.660	0.0617

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
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STATION NAME : RAVEN LAKE/DAILY/AEROCHEM

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REMOVAL DATE	EXPOSURE DATE	SAMPLING START/END HR. HR.	PRECIP START/END HR. HR.	SAMPLE TYPE 01-RAIN 02-SNOW 03-COMP/04-OTHER	GAUGE DEPTH(MM)	GAUGE TYPE 01-STD. 02-NIPHER	SAMPLE NUMBER	PROJECT CODE 02-APIOS 03-SPECIAL	SUBPROJECT CODE 01-MOE 03-AES	SAMPLER EFFICI- ENCY (%)	COMMENTS FIELD OFFICE
MAR 14,88	MAR 13,88	900 900	1620 2000	2	0.4	2	48289	2	1	54	
MAR 19,88	MAR 18,88	900 900	940 1415	2	1.2	2	48290	2	1	45	N
MAR 20,88	MAR 19,88	900 900	1625 1720	2	1.0	2	48291	2	1	82	HM
MAR 26,88	MAR 25,88	900 900	1030 2030	1	9.2	2	48293	2	1	110	
MAR 27,88	MAR 26,88	900 900	1615 2200	1	3.8	2	48294	2	1	121	N
MAR 28,88	MAR 27,88	900 900	1200 1700	2	1.6	2	48295	2	1	22	N
MAR 29,88	MAR 28,88	900 850	2400 300	1	0.2	2	48296	2	1	429	N
APR 3,88	APR 2,88	830 930	300 630	1	7.2	2	48298	2	1	108	
APR 4,88	APR 3,88	930 900	1220 1500	1	7.4	2	48299	2	1	105	
APR 5,88	APR 4,88	900 900	1000 1210	1	1.4	2	48300	2	1	154	N
APR 7,88	APR 6,88	900 915	2400 600	1	0.3	2	48301	2	1	218	NHCM
APR 8,88	APR 7,88	915 900	900 1230	1	2.0	2	48302	2	1	171	N
APR 14,88	APR 13,88	900 915	500 915	1	6.2	1	48304	2	1	101	
APR 15,88	APR 14,88	915 900	1740 2100	3	4.4	1	48305	2	1	88	
APR 16,88	APR 15,88	900 915	1100 1430	2	0.8	1	48306	2	1	15	N
APR 18,88	APR 17,88	900 915	2100 300	3	7.0	1	48307	2	1	97	JHM
APR 19,88	APR 18,88	915 900	915 1100	2	0.6	1	48308	2	1	41	N
APR 21,88	APR 20,88	900 900	1730 2100	3	4.8	1	48309	2	1	100	JM
APR 24,88	APR 23,88	900 900	2130 2220	3	7.8	1	48311	2	1	89	
APR 25,88	APR 24,88	900 900	900 1100	1	0.2	1	48312	2	1	109	
APR 26,88	APR 25,88	900 915	400 915	1	7.2	1	48313	2	1	103	
APR 28,88	APR 27,88	900 900	1640 2350	1	8.0	1	48315	2	1	101	
APR 29,88	APR 28,88	900 900	1838 100	1	1.4	1	48316	2	1	57	
APR 30,88	APR 29,88	900 900	900 1430	1	3.0	1	48317	2	1	93	C
MAY 10,88	MAY 9,88	900 900	2130 2230	1	5.0	1	48320	2	1	104	
MAY 13,88	MAY 12,88	900 900	900 1000	1	1.2	1	48321	2	1	88	
MAY 14,88	MAY 13,88	900 900	900 1130	1	4.4	1	48322	2	1	93	JH
MAY 16,88	MAY 15,88	900 900	2100 300	1	24.0	1	48323	2	1	100	
MAY 17,88	MAY 16,88	900 900	1500 2000	1	28.4	1	48324	2	1	107	
MAY 18,88	MAY 17,88	900 900	900 1420	1	6.0	1	48327	2	1	97	
MAY 20,88	MAY 19,88	900 900	1740 1900	1	2.0	1	48329	2	1	70	H
MAY 21,88	MAY 20,88	900 900	900 1230	1	7.3	1	48330	2	1	104	M
MAY 22,88	MAY 21,88	900 900	900 1030	1	0.2	1	48331	2	1	****	E N
MAY 25,88	MAY 24,88	900 900	100 700	1	2.8	1	48332	2	1	88	M
JUN 2,88	JUN 1,88	900 900	1500 1600	1	1.0	1	48334	2	1	87	
JUN 3,88	JUN 2,88	900 900	2000 300	1	1.0	1	48335	2	1	87	
JUN 7,88	JUN 6,88	900 900	1630 1800	1	0.7	1	48337	2	1	115	H
JUN 8,88	JUN 7,88	900 900	****	1	0.2	1	48338	2	1	54	E
JUN 20,88	JUN 19,88	900 900	****	1	0.3	1	48341	2	1	****	E N
JUN 22,88	JUN 21,88	900 900	2340 830	1	9.8	1	48342	2	1	112	J

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
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STATION NAME : RAVEN LAKE/DAILY/AEROCHEM

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REMOVAL DATE	EXPOSURE DATE	VOLUME ML	CONDUCT. UMHO/CM	PH FIELD	PH LAB	TOTAL H+ TO PH8.3 MG/L	TOTAL H+ GRAN MG/L	SULPHATE MG/L	NITRATE AS N MG/L
MAR 14,88	MAR 13,88	14.0	17.5	*****	4.75	*****	0.0417	1.95	0.57
MAR 19,88	MAR 18,88	35.0	28.0	*****	4.58	*****	0.0538	D 2.05	1.06
MAR 20,88	MAR 19,88	53.0	8.0	*****	UG 7.07	*****	0.0159	0.70	0.18
MAR 26,88	MAR 25,88	652.0	23.5	D 4.39	4.43	*****	D 0.0573	2.65	0.41
MAR 27,88	MAR 26,88	295.0	40.0	4.23	4.24	*****	0.0866	D 3.90	1.23
MAR 28,88	MAR 27,88	23.0	4.0	*****	5.31	*****	0.0197	0.50	<T 0.04
MAR 29,88	MAR 28,88	55.0	16.5	*****	4.63	*****	0.0429	1.85	0.36
APR 3,88	APR 2,88	501.0	47.0	4.00	3.95	*****	0.1390	3.95	0.64
APR 4,88	APR 3,88	500.0	18.5	4.43	4.45	*****	0.0527	1.95	0.20
APR 5,88	APR 4,88	139.0	22.0	4.48	4.49	*****	0.0553	2.15	0.59
APR 7,88	APR 6,88	42.0	> 100.0	*****	LG 3.39	*****	UG 0.4760	> 10.00	> 2.00
APR 8,88	APR 7,88	220.0	85.0	D 3.78	3.81	*****	0.2110	6.50	1.44
APR 14,88	APR 13,88	404.0	85.0	3.80	3.85	*****	0.1910	6.20	2.36
APR 15,88	APR 14,88	250.0	36.0	4.18	4.28	*****	0.0826	3.80	0.78
APR 16,88	APR 15,88	8.0	LG 3.5	*****	UGR 5.85	*****	UGR 0.0251	0.50	LG 0.05
APR 18,88	APR 17,88	437.0	8.0	UG 5.55	6.70	*****	UG 0.0168	1.20	0.33
APR 19,88	APR 18,88	16.0	LG 3.5	*****	UGR 6.73	*****	UGR 0.0168	0.45	LG 0.07
APR 21,88	APR 20,88	310.0	29.5	UG 6.47	UG 7.42	*****	0.0164	4.40	0.96
APR 24,88	APR 23,88	450.0	62.0	4.02	4.04	*****	0.1410	5.45	1.71
APR 25,88	APR 24,88	14.0	17.0	*****	4.57	*****	0.0500	1.85	0.14
APR 26,88	APR 25,88	479.0	33.0	4.70	5.06	*****	0.0395	4.95	1.27
APR 28,88	APR 27,88	519.0	30.0	4.12	4.16	*****	0.0988	3.30	0.77
APR 29,88	APR 28,88	52.0	37.5	*****	UGR 4.25	*****	UGR 0.0899	2.60	0.61
APR 30,88	APR 29,88	179.0	8.5	4.80	4.92	*****	0.0312	0.45	LG 0.08
MAY 10,88	MAY 9,88	335.0	40.0	4.11	4.22	*****	0.0937	4.95	0.54
MAY 13,88	MAY 12,88	68.0	35.0	*****	B 7.01	*****	0.0218	6.60	1.26
MAY 14,88	MAY 13,88	263.0	12.5	4.88	5.51	*****	0.0248	2.70	0.35
MAY 16,88	MAY 15,88	1546.0	42.5	4.04	4.11	*****	0.1100	4.45	0.68
MAY 17,88	MAY 16,88	1960.0	9.5	4.68	4.97	*****	0.0313	0.95	0.21
MAY 18,88	MAY 17,88	374.0	9.0	4.64	4.73	*****	0.0340	0.90	0.11
MAY 20,88	MAY 19,88	90.0	6.5	*****	5.18	*****	0.0245	0.60	0.21
MAY 21,88	MAY 20,88	487.0	LG 2.0	UG 5.29	5.48	*****	LG 0.0136	<W 0.05	0.07
MAY 22,88	MAY 21,88	*****	*****	*****	*****	*****	*****	*****	*****
MAY 25,88	MAY 24,88	159.0	9.0	4.66	4.85	*****	0.0314	1.10	0.10
JUN 2,88	JUN 1,88	56.0	21.0	*****	4.59	*****	0.0497	2.85	0.38
JUN 3,88	JUN 2,88	56.0	14.5	*****	4.61	*****	0.0464	0.70	0.38
JUN 7,88	JUN 6,88	52.0	13.5	*****	UG 5.60	*****	0.0210	2.00	0.33
JUN 8,88	JUN 7,88	7.0	!IS *****	*****	5.43	*****	0.0204	!IS *****	!IS *****
JUN 20,88	JUN 19,88	*****	!RE *****	*****	!RE *****	*****	!RE *****	!RE *****	!RE *****
JUN 22,88	JUN 21,88	709.0	17.0	4.32	4.77	*****	0.0405	2.30	0.52

ONTARIO MINISTRY OF THE ENVIRONMENT
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STATION NAME : RAVEN LAKE/DAILY/AEROCHEM

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REMOVAL DATE	EXPOSURE DATE	CALCIUM		CHLORIDE		MAGNESIUM		POTASSIUM		SODIUM		AMMONIUM AS N		FREE H+
		MG/L		MG/L		MG/L		MG/L		MG/L		MG/L		LAB MG/L
MAR 14,88	MAR 13,88	!IS	*****		0.24	!IS	*****	!IS	*****	!IS	*****		0.560	0.0178
MAR 19,88	MAR 18,88	!IS	*****	D	0.39	!IS	*****	!IS	*****	!IS	*****		0.590	0.0263
MAR 20,88	MAR 19,88		0.46		0.46		0.040	<T	0.010		0.300		0.240	UG 0.0001
MAR 26,88	MAR 25,88		0.46		0.23		0.050		0.035		0.250		0.220	0.0372
MAR 27,88	MAR 26,88		0.96	D	0.31		0.100		0.050		0.070		0.840	0.0575
MAR 28,88	MAR 27,88	<T	0.04	<T	0.02	<W	0.005	<T	0.015	<T	0.025		0.070	0.0049
MAR 29,88	MAR 28,88		0.48		0.08		0.035		0.025		0.055		0.190	0.0234
APR 3,88	APR 2,88		0.20		0.40		0.035		0.025		0.190		0.220	0.1122
APR 4,88	APR 3,88		0.14	<T	0.05	<T	0.010	<T	0.020		0.030		0.140	0.0355
APR 5,88	APR 4,88		0.12		0.08	<T	0.005	<T	0.025		0.030		0.750	0.0324
APR 7,88	APR 6,88		2.24		0.94		0.265	UG	0.445		0.445		1.500	LG 0.4074
APR 8,88	APR 7,88		0.36		0.29		0.040		0.060		0.105		0.570	0.1549
APR 14,88	APR 13,88		1.06		0.49		0.185		0.055		0.125		1.160	0.1413
APR 15,88	APR 14,88		0.32		0.14		0.065		0.055		0.035		0.770	0.0525
APR 16,88	APR 15,88		0.14		0.08	<T	0.005		0.055		0.030	!IS	*****	UCR 0.0014
APR 18,88	APR 17,88		0.42		0.05		0.065		0.025	<T	0.015		0.330	UG 0.0002
APR 19,88	APR 18,88		0.34		0.10	<T	0.020		0.040		0.050	!IS	*****	UCR 0.0002
APR 21,88	APR 20,88		1.72		0.23		0.300		0.095	D	0.100		1.590	UG 0.0000
APR 24,88	APR 23,88		0.92		0.32		0.125		0.065		0.070		1.160	0.0912
APR 25,88	APR 24,88		0.14		0.14	<T	0.010		0.080		0.080	!IS	*****	0.0269
APR 26,88	APR 25,88		0.84		0.14		0.180		0.045		0.050		1.780	0.0087
APR 28,88	APR 27,88		0.38		0.14		0.035		0.040		0.030		0.390	0.0692
APR 29,88	APR 28,88		0.18		0.11	<T	0.020		0.040		0.075		0.270	UCR 0.0562
APR 30,88	APR 29,88	<T	0.02	<T	0.04	<W	0.005	<W	0.005	<T	0.015		0.060	0.0120
MAY 10,88	MAY 9,88		0.66		0.20		0.075		0.065		0.035		0.620	0.0603
MAY 13,88	MAY 12,88		2.10		0.32		0.330	D	0.155		0.105		1.840	B 0.0001
MAY 14,88	MAY 13,88		0.62	<T	0.05		0.040		0.030	<T	0.010		0.670	0.0031
MAY 16,88	MAY 15,88		0.38		0.12		0.050	<T	0.020	<T	0.005		0.540	0.0776
MAY 17,88	MAY 16,88		0.12	<T	0.03	<T	0.020	<T	0.010	<W	0.005		0.190	0.0107
MAY 18,88	MAY 17,88	<W	0.02	<T	0.02	<W	0.005	<W	0.005	<T	0.005		0.080	0.0186
MAY 20,88	MAY 19,88	<T	0.06	D	0.07	<T	0.010		0.070		0.045		0.146	0.0066
MAY 21,88	MAY 20,88	<W	0.02	<T	0.01	<W	0.005	<W	0.005	<W	0.005	LG	0.012	0.0033
MAY 22,88	MAY 21,88		*****		*****		*****		*****		*****		*****	*****
MAY 25,88	MAY 24,88	<T	0.06	<T	0.04	<T	0.010		0.050	<T	0.010		0.064	0.0141
JUN 2,88	JUN 1,88		0.52		0.17		0.080		0.135		0.095		0.252	0.0257
JUN 3,88	JUN 2,88		0.32		0.35		0.040		0.115		0.045	<T	0.003	0.0245
JUN 7,88	JUN 6,88		0.90		0.13		0.135		0.130		0.070	D	0.256	UG 0.0025
JUN 8,88	JUN 7,88		0.14	!IS	*****	<T	0.010		0.055		0.035	<T	0.004	0.0037
JUN 20,88	JUN 19,88	!IS	*****	!RE	*****	!IS	*****	!IS	*****	!IS	*****	!RE	*****	!RE *****
JUN 22,88	JUN 21,88		0.46	<W	0.09		0.070		0.025		0.035		0.592	0.0170

ONTARIO MINISTRY OF THE ENVIRONMENT
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STATION NAME : RAVEN LAKE/DAILY/AEROCHEM

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REMOVAL DATE	EXPOSURE DATE	SAMPLING START/END HR. HR.	PRECIP START/END HR. HR.	SAMPLE TYPE 01-RAIN 02-SNOW 03-COMP/04-OTHER	GAUGE DEPTH(MM)	GAUGE TYPE 01-STD. 02-NIPHER	SAMPLE NUMBER	PROJECT CODE 02-APIOS 03-SPECIAL	SUBPROJECT CODE 01-MOE 03-AES	SAMPLER EFFICI- ENCY (%)	COMMENTS FIELD OFFICE
JUN 23,88	JUN 22,88	900 905	906 1210	1	11.2	1	48343	2	1	103	
JUN 25,88	JUN 24,88	905 900	830 900	1	0.4	1	48344	2	1	109	
JUN 26,88	JUN 25,88	900 900	900 1030	1	9.0	1	48345	2	1	104	C
JUN 29,88	JUN 28,88	900 900	1000 1400	1	6.0	1	48347	2	1	100	J
JUL 11,88	JUL 10,88	910 900	100 900	1	18.0	1	48350	2	1	63	
JUL 12,88	JUL 11,88	900 900	900 930	1	****	1	48354	2	1	****	X
JUL 14,88	JUL 13,88	900 900	100 530	1	4.0	1	48353	2	1	105	
JUL 16,88	JUL 15,88	900 900	200 500	1	2.6	1	48357	2	1	96	JC
JUL 17,88	JUL 16,88	900 900	430 530	1	2.5	1	48356	2	1	94	
JUL 23,88	JUL 22,88	900 900	1300 1400	1	2.0	1	48360	2	1	98	JH
JUL 24,88	JUL 23,88	900 900	430 530	1	0.6	1	48361	2	1	51	
JUL 25,88	JUL 24,88	900 900	1700 2000	1	1.8	1	48362	2	1	88	
JUL 26,88	JUL 25,88	900 900	1835 1930	1	1.2	1	48363	2	1	92	
JUL 27,88	JUL 26,88	900 900	1100 1240	1	2.6	1	48364	2	1	89	
JUL 31,88	JUL 30,88	900 900	1900 1930	1	3.8	1	48365	2	1	84	
AUG 1,88	JUL 31,88	900 900	600 900	1	1.6	1	48366	2	1	83	
AUG 5,88	AUG 4,88	900 900	1753 1900	1	22.8	1	48368	2	1	102	
AUG 6,88	AUG 5,88	900 900	100 430	1	8.0	1	48369	2	1	86	
AUG 7,88	AUG 6,88	900 900	1930 2000	1	0.8	1	48370	2	1	74	
AUG 10,88	AUG 9,88	900 900	1100 1530	1	40.0	1	48371	2	1	84	
AUG 12,88	AUG 11,88	855 900	900 915	1	0.6	1	48374	2	1	75	
AUG 15,88	AUG 14,88	900 900	835 900	1	0.6	1	48375	2	1	127	N
AUG 16,88	AUG 15,88	900 900	900 1000	1	1.2	1	48376	2	1	75	
AUG 17,88	AUG 16,88	900 900	500 800	1	3.4	1	48377	2	1	101	
AUG 18,88	AUG 17,88	900 900	1225 1300	1	13.0	1	48378	2	1	101	
AUG 24,88	AUG 23,88	900 900	1730 900	1	13.0	1	48381	2	1	51	
AUG 25,88	AUG 24,88	900 900	1600 1700	1	7.4	1	48382	2	1	102	
AUG 26,88	AUG 25,88	900 900	1240 1530	1	8.8	1	48383	2	1	98	C
AUG 27,88	AUG 26,88	900 900	910 915	1	0.6	1	48384	2	1	41	N
AUG 28,88	AUG 27,88	900 900	****	1	0.5	1	48385	2	1	99	
SEP 1,88	AUG 31,88	900 900	****	1	1.0	1	48386	2	1	39	N
SEP 3,88	SEP 2,88	900 900	****	1	0.2	1	48387	2	1	U 93	FJ
SEP 4,88	SEP 3,88	900 900	2000 800	1	22.0	1	48388	2	1	U 107	FJ
SEP 5,88	SEP 4,88	900 900	1830 700	1	27.0	1	48389	2	1	U 102	FJ
SEP 7,88	SEP 6,88	900 900	1930 2200	1	0.8	1	48390	2	1	U 74	FJ
SEP 13,88	SEP 12,88	900 900	1230 300	1	4.0	1	48391	2	1	90	M
SEP 15,88	SEP 14,88	900 900	1750 1840	1	1.4	1	48397	2	1	U 71	FJ
SEP 17,88	SEP 16,88	900 900	100 900	1	5.8	1	48396	2	1	U 98	FJ
SEP 18,88	SEP 17,88	900 900	1700 1830	1	1.0	1	48395	2	1	U 90	FJ
SEP 20,88	SEP 19,88	900 900	100 900	1	2.6	1	48394	2	1	U 98	JF

ONTARIO MINISTRY OF THE ENVIRONMENT
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STATION NAME : RAVEN LAKE/DAILY/AEROCHEM

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REMOVAL DATE	EXPOSURE DATE	VOLUME ML	CONDUCT. UMHO/CM	PH FIELD	PH LAB	TOTAL H+ TO PH8.3 MG/L	TOTAL H+ GRAN MG/L	SULPHATE MG/L	NITRATE AS N MG/L
JUN 23,88	JUN 22,88	745.0	16.5	4.74	4.74	*****	0.0703	1.90	0.30
JUN 25,88	JUN 24,88	28.0	D 90.5	*****	3.89	*****	0.1710	D 9.80	2.01
JUN 26,88	JUN 25,88	601.0	39.0	4.15	D 4.47	*****	0.0716	5.30	1.17
JUN 29,88	JUN 28,88	386.0	7.0	4.44	4.94	*****	0.0311	0.65	0.10
JUL 11,88	JUL 10,88	729.0	45.0	4.05	4.15	*****	0.0997	5.05	0.51
JUL 12,88	JUL 11,88	2.0	*****	*****	*****	*****	*****	*****	*****
JUL 14,88	JUL 13,88	270.0	28.5	4.28	4.42	*****	0.0619	3.10	0.53
JUL 16,88	JUL 15,88	160.0	9.5	4.61	5.33	*****	0.0227	0.65	0.28
JUL 17,88	JUL 16,88	152.0	D 35.0	4.14	4.27	*****	0.0769	2.70	0.76
JUL 23,88	JUL 22,88	126.0	13.5	4.59	D 5.47	*****	0.0215	1.15	0.61
JUL 24,88	JUL 23,88	20.0	18.5	*****	4.64	*****	0.0439	1.90	0.41
JUL 25,88	JUL 24,88	102.0	D 27.5	4.21	4.33	*****	0.0678	1.60	0.49
JUL 26,88	JUL 25,88	71.0	34.0	*****	4.29	*****	0.0759	2.90	0.75
JUL 27,88	JUL 26,88	149.0	38.0	4.30	4.16	*****	0.0931	2.75	0.75
JUL 31,88	JUL 30,88	207.0	18.5	4.41	4.54	*****	0.0497	1.90	0.38
AUG 1,88	AUG 31,88	86.0	10.5	*****	UG 6.33	*****	0.0193	1.25	0.38
AUG 5,88	AUG 4,88	1502.0	77.0	3.82	3.85	*****	0.1690	9.85	0.80
AUG 6,88	AUG 5,88	446.0	D 18.5	D 4.40	D 4.57	*****	D 0.0452	D 1.85	0.33
AUG 7,88	AUG 6,88	38.0	7.0	*****	5.23	*****	0.0247	0.65	0.14
AUG 10,88	AUG 9,88	2168.0	54.0	3.92	3.97	*****	0.1310	5.90	0.62
AUG 12,88	AUG 11,88	29.0	22.0	*****	4.39	*****	0.0716	2.40	0.57
AUG 15,88	AUG 14,88	49.0	27.0	*****	4.44	*****	0.0709	3.70	0.83
AUG 16,88	AUG 15,88	58.0	LG 3.0	*****	UG 5.86	*****	0.0209	0.65	LG 0.06
AUG 17,88	AUG 16,88	222.0	7.5	4.54	4.83	*****	0.0381	0.90	0.28
AUG 18,88	AUG 17,88	845.0	14.5	4.43	4.60	*****	0.0514	1.95	0.35
AUG 24,88	AUG 23,88	433.0	56.0	3.87	3.88	*****	0.1640	5.50	0.96
AUG 25,88	AUG 24,88	486.0	15.0	4.60	4.65	*****	0.0471	2.25	0.33
AUG 26,88	AUG 25,88	553.0	D 60.0	UG 6.28	UG 6.49	*****	0.0219	1.20	0.21
AUG 27,88	AUG 26,88	16.0	LG 2.5	*****	UG 6.01	*****	0.0187	0.50	0.07
AUG 28,88	AUG 27,88	32.0	> 100.0	*****	LG 3.38	*****	UG 0.5140	9.20	1.91
SEP 1,88	AUG 31,88	25.0	10.0	*****	B 5.60	*****	0.0237	D 1.50	0.44
SEP 3,88	SEP 2,88	12.0	44.0	*****	4.03	*****	0.1250	4.60	0.94
SEP 4,88	SEP 3,88	1510.0	32.5	4.09	4.09	*****	0.1050	3.40	0.27
SEP 5,88	SEP 4,88	1779.0	6.0	4.74	4.82	*****	0.0336	0.70	0.07
SEP 7,88	SEP 6,88	38.0	D 15.0	*****	!IR *****	*****	!IR *****	2.05	0.21
SEP 13,88	SEP 12,88	232.0	21.5	4.20	4.45	*****	0.0629	2.30	0.38
SEP 15,88	SEP 14,88	64.0	10.0	*****	4.82	*****	0.0393	1.60	<T 0.05
SEP 17,88	SEP 16,88	366.0	D 29.5	D 4.16	4.22	*****	0.0923	D 3.00	0.39
SEP 18,88	SEP 17,88	58.0	79.5	*****	3.91	*****	0.1740	9.90	1.75
SEP 20,88	SEP 19,88	165.0	46.5	4.00	4.07	*****	0.1310	5.65	0.56

ONTARIO MINISTRY OF THE ENVIRONMENT
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APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : RAVEN LAKE/DAILY/AEROCHEM

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REMOVAL DATE	EXPOSURE DATE	CALCIUM MG/L	CHLORIDE MG/L	MAGNESIM MG/L	POTASSIM MG/L	SODIUM MG/L	AMMONIUM AS N MG/L	FREE H+ LAB MG/L
JUN 23,88	JUN 22,88	0.20	0.07	0.035	0.025	<T 0.015	0.344	0.0182
JUN 25,88	JUN 24,88	!IS *****	0.55	!IS *****	!IS *****	!IS *****	D 1.550	0.1288
JUN 26,88	JUN 25,88	D 1.44	0.28	0.130	0.120	D 0.065	D 1.120	0.0339
JUN 29,88	JUN 28,88	0.18	<T 0.05	<T 0.015	<T 0.010	<T 0.010	<T 0.020	0.0115
JUL 11,88	JUL 10,88	0.14	0.09	<T 0.020	<T 0.015	<T 0.020	0.852	0.0708
JUL 12,88	JUL 11,88	*****	*****	*****	*****	*****	*****	*****
JUL 14,88	JUL 13,88	D 0.58	0.09	0.090	0.030	<T 0.010	0.396	0.0360
JUL 16,88	JUL 15,88	0.24	<T 0.04	0.030	<T 0.010	<T 0.020	0.168	0.0047
JUL 17,88	JUL 16,88	0.26	0.18	0.040	0.040	0.110	0.514	0.0537
JUL 23,88	JUL 22,88	0.96	0.11	0.045	0.030	<T 0.015	0.336	D 0.0034
JUL 24,88	JUL 23,88	!IS *****	0.09	!IS *****	!IS *****	!IS *****	0.242	0.0229
JUL 25,88	JUL 24,88	<T 0.10	0.07	<T 0.005	0.040	<T 0.020	0.182	0.0468
JUL 26,88	JUL 25,88	0.56	0.15	0.040	0.045	0.030	0.494	0.0513
JUL 27,88	JUL 26,88	0.26	0.10	<T 0.020	<T 0.015	<T 0.010	0.392	0.0692
JUL 31,88	JUL 30,88	0.22	0.08	0.035	0.035	0.035	0.228	0.0288
AUG 1,88	JUL 31,88	0.22	0.11	0.035	0.045	0.050	0.644	UG 0.0005
AUG 5,88	AUG 4,88	0.54	0.17	0.125	0.035	0.030	1.120	0.1413
AUG 6,88	AUG 5,88	0.16	<T 0.04	0.025	<T 0.020	<T 0.015	D 0.230	D 0.0269
AUG 7,88	AUG 6,88	!IS *****	<T 0.08	!IS *****	!IS *****	!IS *****	0.074	0.0059
AUG 10,88	AUG 9,88	0.34	0.11	0.045	<T 0.020	<T 0.025	0.530	0.1072
AUG 12,88	AUG 11,88	D 0.46	D 0.15	D 0.035	D 0.040	D 0.055	0.226	0.0407
AUG 15,88	AUG 14,88	0.82	0.23	0.110	0.055	0.080	0.576	0.0363
AUG 16,88	AUG 15,88	0.20	<T 0.03	<T 0.015	<T 0.020	<T 0.020	0.076	UG 0.0014
AUG 17,88	AUG 16,88	<T 0.06	<T 0.04	<T 0.015	<W 0.005	<T 0.015	0.216	0.0148
AUG 18,88	AUG 17,88	0.18	<T 0.05	0.040	<T 0.015	<T 0.015	0.320	0.0251
AUG 24,88	AUG 23,88	0.22	0.11	0.025	<T 0.020	<T 0.020	0.500	0.1318
AUG 25,88	AUG 24,88	0.14	0.29	<T 0.020	0.025	0.070	0.540	0.0224
AUG 26,88	AUG 25,88	0.24	<T 0.04	0.040	0.025	<T 0.020	0.476	UG 0.0003
AUG 27,88	AUG 26,88	!IS *****	0.06	!IS *****	!IS *****	!IS *****	0.070	UG 0.0010
AUG 28,88	AUG 27,88	!IS *****	0.85	!IS *****	!IS *****	!IS *****	1.790	LG 0.4169
SEP 1,88	AUG 31,88	!IS *****	0.10	!IS *****	!IS *****	!IS *****	D 0.226	B 0.0025
SEP 3,88	SEP 2,88	!IS *****	0.18	!IS *****	!IS *****	!IS *****	0.320	0.0933
SEP 4,88	SEP 3,88	<T 0.04	<W 0.01	<T 0.005	<T 0.005	<W 0.005	0.226	0.0813
SEP 5,88	SEP 4,88	<W 0.02	<W 0.01	<W 0.005	<W 0.005	<W 0.005	0.090	0.0151
SEP 7,88	SEP 6,88	D 2.02	0.18	0.110	0.090	0.115	0.266	!IR *****
SEP 13,88	SEP 12,88	0.20	0.42	0.025	<T 0.015	0.035	0.230	0.0355
SEP 15,88	SEP 14,88	0.18	<W 0.01	<T 0.015	0.025	0.030	0.110	0.0151
SEP 17,88	SEP 16,88	0.10	0.06	<T 0.015	0.015	<T 0.015	D 0.140	0.0603
SEP 18,88	SEP 17,88	D 0.78	B 1.47	D 0.075	0.075	D 0.115	1.890	0.1230
SEP 20,88	SEP 19,88	D 0.58	0.28		0.070	0.125	0.266	0.0851

ONTARIO MINISTRY OF THE ENVIRONMENT
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STATION NAME : RAVEN LAKE/DAILY/AEROCHEM

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REMOVAL DATE	EXPOSURE DATE	SAMPLING START/END HR. HR.	PRECIP START/END HR. HR.	SAMPLE TYPE 01-RAIN 02-SNOW 03-COMP/04-OTHER	GAUGE DEPTH(MM)	GAUGE TYPE 01-STD. 02-NIPHER	SAMPLE NUMBER	PROJECT CODE 02-APIOS 03-SPECIAL	SUBPROJECT CODE 01-MOE 03-AES	SAMPLER EFFICI- ENCY (%)	COMMENTS FIELD OFFICE
SEP 21,88	SEP 20,88	900 900	100 600	1	1.6	1	48393	2	1	U 78	FJ HM
SEP 22,88	SEP 21,88	900 900	1000 1130	1	1.0	1	48398	2	1	U 71	JF
SEP 23,88	SEP 22,88	900 900	2100 2230	1	10.4	1	48399	2	1	U 104	FJ HCM
SEP 27,88	SEP 26,88	900 900	1900 2000	1	1.2	1	48401	2	1	U 59	FJ
SEP 28,88	SEP 27,88	900 900	1330 1600	1	11.6	1	48402	2	1	U 95	FJ
OCT 2,88	OCT 1,88	900 900	300 900	1	10.6	1	48403	2	1	U 96	BCJF J
OCT 3,88	OCT 2,88	900 900	1700 2100	1	6.0	1	48404	2	1	U 92	CDFJ JM
OCT 5,88	OCT 4,88	900 900	1700 500	1	14.6	1	48405	2	1	U 102	FJ
OCT 8,88	OCT 7,88	900 900	1500 1650	1	6.0	1	48406	2	1	U 93	CFJ JHM
OCT 11,88	OCT 10,88	900 900	1600 ****	1	9.6	1	48407	2	1	U 95	FJ
OCT 12,88	OCT 11,88	900 900	1000 1030	1	0.2	1	48408	2	1	****	EFJ
OCT 17,88	OCT 16,88	900 900	30 300	1	1.6	1	48409	2	1	83	
OCT 18,88	OCT 17,88	900 900	2130 500	1	12.4	1	48410	2	1	52	HM
OCT 22,88	OCT 21,88	900 900	1500 2100	1	7.4	1	48412	2	1	98	
OCT 23,88	OCT 22,88	900 900	900 1210	1	2.0	1	48413	2	1	81	
OCT 24,88	OCT 23,88	900 900	2000 100	1	5.0	1	48414	2	1	97	N
OCT 25,88	OCT 24,88	900 900	1020 1300	1	4.8	1	48415	2	1	93	
OCT 26,88	OCT 25,88	900 900	900 1220	1	4.6	1	48416	2	1	93	JHCM
OCT 28,88	OCT 27,88	900 900	2030 2140	1	4.0	2	48418	2	1	122	N
OCT 29,88	OCT 28,88	900 900	2100 2340	2	1.0	2	48419	2	1	112	C
OCT 30,88	OCT 29,88	900 900	2100 2200	2	5.4	2	48420	2	1	82	JHCM
NOV 1,88	OCT 31,88	900 900	**** ****	1	0.2	2	48422	2	1	U 343	FJ
NOV 4,88	NOV 2,88	900 900	2000 2130	1	2.5	1	84957	2	1	130	NZ
NOV 5,88	NOV 4,88	900 900	1500 1530	1	0.2	1	84958	2	1	280	N
NOV 7,88	NOV 6,88	900 900	1500 1530	1	****	1	84961	2	1	****	E
NOV 9,88	NOV 7,88	900 900	1040 1800	1	6.8	1	84962	2	1	113	Q Z
NOV 10,88	NOV 9,88	900 900	100 850	1	8.1	2	84986	2	1	83	Q M
NOV 11,88	NOV 10,88	900 900	1400 1600	1	1.8	2	84987	2	1	149	Q N
NOV 13,88	NOV 12,88	900 900	100 900	1	8.1	2	84989	2	1	80	Q
NOV 14,88	NOV 13,88	900 900	900 630	1	4.2	2	84990	2	1	124	Q N
NOV 15,88	NOV 14,88	900 900	1500 1530	1	****	*	84991	2	1	****	Q
NOV 17,88	NOV 15,88	900 900	1915 2040	1	0.4	2	40009	2	1	237	Q NHMZ
NOV 18,88	NOV 17,88	900 900	1800 2000	2	1.4	2	40010	2	1	92	Q
NOV 20,88	NOV 18,88	900 900	1700 1800	3	0.8	2	40011	2	1	109	Q HCMZ
NOV 21,88	NOV 20,88	900 900	1840 2200	3	12.0	2	40012	2	1	102	Q HCM
NOV 27,88	NOV 26,88	900 900	2323 2400	1	0.2	2	42525	2	1	U 296	EK
NOV 29,88	NOV 27,88	900 900	940 1400	3	2.6	2	42526	2	1	116	Z
DEC 1,88	NOV 29,88	900 900	1030 1210	3	0.8	2	42499	2	1	165	NHZ
DEC 2,88	DEC 1,88	900 900	930 1135	2	0.2	2	42500	2	1	31	
DEC 4,88	DEC 2,88	900 900	1700 1720	4	0.2	2	42501	2	1	171	Z

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : RAVEN LAKE/DAILY/AEROCHEM

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REMOVAL DATE	EXPOSURE DATE	VOLUME ML	CONDUCT. UMHO/CM	PH FIELD	PH LAB	TOTAL H+ TO PH8.3 MG/L	TOTAL H+ GRAN MG/L	SULPHATE MG/L	NITRATE AS N MG/L
SEP 21,88	SEP 20,88	81.0	28.0	*****	UG 7.36	*****	0.0215	5.45	1.06
SEP 22,88	SEP 21,88	46.0	13.5	*****	!IS *****	*****	!IS *****	2.05	0.11
SEP 23,88	SEP 22,88	699.0	34.0	4.13	4.41	*****	0.1810	2.70	0.58
SEP 27,88	SEP 26,88	46.0	5.0	*****	!IS *****	*****	!IS *****	0.60	0.13
SEP 28,88	SEP 27,88	713.0	27.0	4.51	4.76	*****	0.0454	5.65	0.69
OCT 2,88	OCT 1,88	654.0	26.0	B 5.33	B 7.22	*****	D 0.0353	2.90	0.35
OCT 3,88	OCT 2,88	355.0	6.5	4.88	B 7.09	*****	0.0278	1.30	LG 0.06
OCT 5,88	OCT 4,88	958.0	10.0	4.60	4.71	*****	0.0422	D 1.00	0.34
OCT 8,88	OCT 7,88	358.0	6.0	UG 5.45	UG 6.77	*****	0.0196	1.55	0.32
OCT 11,88	OCT 10,88	588.0	16.5	4.60	4.64	*****	0.0526	D 3.10	0.55
OCT 12,88	OCT 11,88	*****	*****	*****	*****	*****	*****	*****	*****
OCT 17,88	OCT 16,88	86.0	43.0	*****	4.18	*****	D 0.0967	4.85	1.06
OCT 18,88	OCT 17,88	418.0	23.5	4.38	4.32	*****	0.0714	1.85	<T 0.02
OCT 22,88	OCT 21,88	468.0	39.5	4.17	4.11	*****	0.1040	1.90	1.04
OCT 23,88	OCT 22,88	104.0	8.0	4.89	4.75	*****	0.0377	0.40	0.17
OCT 24,88	OCT 23,88	312.0	29.0	4.27	4.25	*****	0.0791	1.30	0.64
OCT 25,88	OCT 24,88	288.0	17.5	4.72	4.67	*****	0.0434	1.95	0.46
OCT 26,88	OCT 25,88	276.0	15.0	UG 6.87	UG 7.77	*****	LG 0.0123	0.85	0.10
OCT 28,88	OCT 27,88	314.0	40.0	4.16	4.14	*****	D 0.0979	2.75	0.86
OCT 29,88	OCT 28,88	72.0	24.0	*****	B 7.51	*****	LG 0.0133	D 2.55	0.20
OCT 30,88	OCT 29,88	287.0	4.0	5.01	4.59	*****	0.0448	0.65	0.07
NOV 1,88	OCT 31,88	44.0	74.0	*****	4.50	*****	0.0590	2.90	!IS *****
NOV 4,88	NOV 2,88	209.0	44.0	*****	3.97	*****	0.1420	3.80	0.81
NOV 5,88	NOV 4,88	36.0	53.5	*****	3.89	*****	0.1640	4.70	1.05
NOV 7,88	NOV 6,88	4.0	*****	*****	*****	*****	*****	*****	*****
NOV 9,88	NOV 7,88	495.0	16.0	*****	4.43	*****	0.0634	1.25	0.36
NOV 10,88	NOV 9,88	436.0	23.5	*****	4.43	*****	0.0689	2.25	0.47
NOV 11,88	NOV 10,88	173.0	9.0	*****	D 4.90	*****	0.0309	1.45	<T 0.04
NOV 13,88	NOV 12,88	420.0	21.0	*****	4.31	*****	0.0701	1.55	0.56
NOV 14,88	NOV 13,88	336.0	14.5	*****	D 4.47	*****	D 0.0546	D 1.30	0.25
NOV 15,88	NOV 14,88	30.0	!IS *****	*****	UG 5.74	*****	0.0192	!IS *****	!IS *****
NOV 17,88	NOV 15,88	61.0	24.0	*****	UG 7.50	*****	LG 0.0155	4.25	0.81
NOV 18,88	NOV 17,88	83.0	9.5	*****	UG 7.07	*****	LG 0.0162	1.75	0.30
NOV 20,88	NOV 18,88	56.0	99.5	*****	4.61	*****	0.0436	5.15	2.98
NOV 21,88	NOV 20,88	788.0	10.5	*****	4.27	*****	D 0.0791	0.95	<T 0.04
NOV 27,88	NOV 26,88	38.0	D 79.0	*****	3.79	*****	0.2270	D 8.60	0.92
NOV 29,88	NOV 27,88	194.0	14.0	*****	4.95	*****	0.0319	2.15	0.66
DEC 1,88	NOV 29,88	85.0	19.0	*****	UG 6.11	*****	0.0190	2.80	1.39
DEC 2,88	DEC 1,88	4.0	!IS *****	*****	UG 6.58	*****	LG 0.0126	!IS *****	!IS *****
DEC 4,88	DEC 2,88	22.0	!IS *****	*****	5.05	*****	0.0282	!IS *****	!IS *****

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : RAVEN LAKE/DAILY/AEROCHEM

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REMOVAL DATE	EXPOSURE DATE	CALCIUM MG/L	CHLORIDE MG/L	MAGNESIM MG/L	POTASSIM MG/L	SODIUM MG/L	AMMONIUM AS N MG/L	FREE H+ LAB MG/L
SEP 21,88	SEP 20,88	1.84	0.30	0.190	0.205	0.080	1.360	UG 0.0000
SEP 22,88	SEP 21,88	!IS *****	0.12	!IS *****	!IS *****	!IS *****	0.190	!IS *****
SEP 23,88	SEP 22,88	<T 0.08	0.10	<T 0.015	0.036	0.047	0.356	0.0389
SEP 27,88	SEP 26,88	0.26	0.06	<T 0.015	<T 0.020	0.035	0.170	!IS *****
SEP 28,88	SEP 27,88	1.30	0.14	0.160	0.050	0.030	1.020	0.0174
OCT 2,88	OCT 1,88	D 0.76	0.27	D 0.150	U 2.040	0.080	D 1.320	B 0.0001
OCT 3,88	OCT 2,88	<T 0.06	0.22	<T 0.020	UG 0.355	0.130	D 0.670	B 0.0001
OCT 5,88	OCT 4,88	0.16	<T 0.04	<T 0.010	<T 0.010	<T 0.010	0.196	0.0195
OCT 8,88	OCT 7,88	0.80	<W 0.01	<T 0.010	0.035	0.040	0.250	UG 0.0002
OCT 11,88	OCT 10,88	0.48	0.11	<T 0.005	0.040	<T 0.020	D 0.830	0.0229
OCT 12,88	OCT 11,88	*****	*****	*****	*****	*****	*****	*****
OCT 17,88	OCT 16,88	D 1.08	0.17	D 0.120	0.080	D 0.130	0.700	0.0661
OCT 18,88	OCT 17,88	<T 0.10	0.07	<T 0.010	<T 0.015	<T 0.010	D 0.170	0.0479
OCT 22,88	OCT 21,88	0.28	0.15	<T 0.030	<T 0.020	<T 0.015	0.300	0.0776
OCT 23,88	OCT 22,88	<T 0.04	<T 0.02	<W 0.005	<W 0.005	<W 0.005	<T 0.010	0.0178
OCT 24,88	OCT 23,88	<T 0.06	0.12	<W 0.005	<T 0.005	<W 0.005	0.176	0.0562
OCT 25,88	OCT 24,88	0.42	0.08	0.045	0.030	0.125	0.330	0.0214
OCT 26,88	OCT 25,88	2.50	0.22	0.045	<T 0.025	<T 0.010	0.136	UG 0.0000
OCT 28,88	OCT 27,88	0.36	0.22	0.030	0.030	<T 0.015	0.256	0.0724
OCT 29,88	OCT 28,88	B 3.44	0.06	D 0.090	0.045	0.030	0.406	B 0.0000
OCT 30,88	OCT 29,88	0.12	<T 0.02	<T 0.005	<T 0.010	<T 0.005	0.070	0.0257
NOV 1,88	OCT 31,88	2.78	0.83	0.305	0.195	UG 0.325	0.196	0.0316
NOV 4,88	NOV 2,88	0.22	0.22	0.030	0.030	0.035	0.310	0.1072
NOV 5,88	NOV 4,88	!IS *****	0.54	!IS *****	!IS *****	!IS *****	LG 0.006	0.1288
NOV 7,88	NOV 6,88	*****	*****	*****	*****	*****	*****	*****
NOV 9,88	NOV 7,88	<T 0.06	0.09	<W 0.005	<T 0.005	<T 0.010	0.186	0.0372
NOV 10,88	NOV 9,88	0.12	0.21	<T 0.025	<T 0.025	0.115	0.196	0.0372
NOV 11,88	NOV 10,88	0.22	0.06	<T 0.020	<T 0.005	<T 0.015	0.070	D 0.0126
NOV 13,88	NOV 12,88	<T 0.06	0.09	<T 0.010	<T 0.010	0.025	D 0.180	0.0490
NOV 14,88	NOV 13,88	<W 0.02	<T 0.05	<W 0.005	<T 0.005	<T 0.010	0.136	D 0.0339
NOV 15,88	NOV 14,88	0.88	!IS *****	0.070	0.040	0.100	0.186	UG 0.0018
NOV 17,88	NOV 15,88	1.82	0.23	0.140	0.105	0.100	0.266	UG 0.0000
NOV 18,88	NOV 17,88	1.22	0.12	0.100	0.025	0.040	0.336	UG 0.0001
NOV 20,88	NOV 18,88	0.54	0.40	0.050	0.065	0.115	0.526	0.0245
NOV 21,88	NOV 20,88	<T 0.08	<T 0.05	<T 0.005	<T 0.010	<T 0.015	0.040	0.0537
NOV 27,88	NOV 26,88	D 0.52	D 0.98	D 0.070	0.055	0.325	!IS *****	0.1622
NOV 29,88	NOV 27,88	0.80	0.11	<T 0.020	<T 0.020	0.030	0.578	0.0112
DEC 1,88	NOV 29,88	2.52	<W 0.01	0.105	0.035	0.100	0.430	UG 0.0008
DEC 2,88	DEC 1,88	!IS *****	!IS *****	!IS *****	!IS *****	!IS *****	<T 0.020	UG 0.0003
DEC 4,88	DEC 2,88	!IS *****	!IS *****	!IS *****	!IS *****	!IS *****	0.336	0.0089

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : RAVEN LAKE/DAILY/AEROCHEM

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REMOVAL DATE	EXPOSURE DATE	SAMPLING START/END HR. HR.	PRECIP START/END HR. HR.	SAMPLE TYPE 01-RAIN 02-SNOW 03-COMP/04-OTHER	GAUGE DEPTH(MM)	GAUGE TYPE 01-STD. 02-NIPHER	SAMPLE NUMBER	PROJECT CODE 02-APIOS 03-SPECIAL	SUBPROJECT CODE 01-MOE 03-AES	SAMPLER EFFICI- ENCY (%)	COMMENTS FIELD OFFICE
DEC 5,88	DEC 4,88	900 900	930 1500	2	2.8	2	42502	2	1	70	
DEC 9,88	DEC 8,88	900 900	900 1000	2	2.5	2	42494	2	1	71	
DEC 10,88	DEC 9,88	900 900	630 900	2	0.5	2	42495	2	1	68	
DEC 13,88	DEC 11,88	900 900	700 1000	2	1.6	2	42497	2	1	38	Z
DEC 14,88	DEC 13,88	900 900	908 600	2	0.8	2	42498	2	1	76	
DEC 15,88	DEC 14,88	900 900	1240 1430	2	4.0	2	40039	2	1	U 78	EF
DEC 17,88	DEC 15,88	900 900	600 900	2	1.4	2	40040	2	1	U 80	EF Z
DEC 18,88	DEC 17,88	900 900	900 930	2	0.3	2	40041	2	1	U 109	EF
DEC 19,88	DEC 18,88	900 900	1900 2350	2	0.8	2	40042	2	1	105	E N
DEC 21,88	DEC 19,88	900 900	830 1400	1	4.3	2	40043	2	1	120	E NZ
DEC 23,88	DEC 22,88	900 900	800 900	3	7.2	2	42528	2	1	U 86	EFJ
DEC 25,88	DEC 24,88	900 900	1330 2300	2	4.5	2	42530	2	1	U 114	EF
DEC 26,88	DEC 25,88	900 900	1320 2200	2	9.2	2	42531	2	1	U 63	EFJ
DEC 27,88	DEC 26,88	900 900	500 900	2	7.0	2	42532	2	1	U 22	FEJ
DEC 28,88	DEC 27,88	900 900	****	3	22.6	2	42533	2	1	U 94	EFJ
DEC 29,88	DEC 28,88	900 900	1100 2100	2	1.2	2	42534	2	1	U 52	EFJ
DEC 31,88	DEC 30,88	900 900	2130 2230	2	0.3	2	40038	2	1	****	FE

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PART IV

NORTHEASTERN REGION

DAILY PRECIPITATION CHEMISTRY LISTINGS

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : GOMGANDA/DAILY/AEROCHEM

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REMOVAL DATE	EXPOSURE DATE	SAMPLING START/END HR. HR.	PRECIP START/END HR. HR.	SAMPLE TYPE 01-RAIN 02-SNOW 03-COMP/04-OTHER	GAUGE DEPTH(MM)	GAUGE TYPE 01-STD. 02-NIPHER	SAMPLE NUMBER	PROJECT CODE 02-APIOS 03-SPECIAL	SUBPROJECT CODE 01-MOE 03-AES	SAMPLER EFFICI- ENCY (%)	COMMENTS FIELD OFFICE
APR 14,88	APR 12,88	855 935	2330 935	3	****	2	37537	2	1	7	NHMY2
APR 15,88	APR 14,88	935 925	935 1700	2	****	2	37538	2	1	3	N
APR 16,88	APR 15,88	925 804	****	2	20.0	2	37539	2	1	2	N
APR 17,88	APR 16,88	804 949	745 845	1	****	2	37540	2	1	****	
APR 18,88	APR 17,88	949 943	1400 2230	3	18.0	2	37541	2	1	14	NHCM
APR 19,88	APR 18,88	943 901	****	2	3.5	*	37542	2	1	1	E N
APR 24,88	APR 23,88	735 852	1500 2300	3	****	2	37586	2	1	6	N
APR 25,88	APR 24,88	852 900	852 1400	1	7.0	*	37587	2	1	****	E N
APR 26,88	APR 25,88	900 930	1800 930	2	****	2	37588	2	1	8	N
APR 27,88	APR 26,88	930 930	930 1200	3	52.5	2	37589	2	1	7	NM
APR 29,88	APR 27,88	930 929	1600 800	1	****	2	37590	2	1	****	Y2
MAY 9,88	MAY 8,88	850 1002	700 956	1	****	1	37640	2	1	****	
MAY 10,88	MAY 9,88	1002 938	300 1130	1	4.8	1	37641	2	1	103	
MAY 11,88	MAY 10,88	938 839	938	1	0.8	1	37642	2	1	462	N
MAY 13,88	MAY 12,88	850 835	2300 200	1	9.8	1	37644	2	1	127	N
MAY 14,88	MAY 13,88	835 726	910 1244	1	0.8	1	37645	2	1	74	
MAY 15,88	MAY 14,88	726 730	134 730	1	6.1	*	37646	2	1	116	C
MAY 16,88	MAY 15,88	730 830	740 930	1	8.8	*	37647	2	1	U 96	I
MAY 17,88	MAY 16,88	830 704	832 835	1	****	*	37648	2	1	****	E
MAY 20,88	MAY 17,88	704 810	**** 149	1	4.0	1	37667	2	1	103	Y3
MAY 21,88	MAY 20,88	810 830	1900 22	1	0.8	1	37668	2	1	111	CD J
MAY 22,88	MAY 21,88	830 821	228 1239	1	0.4	1	37669	2	1	156	CD N
MAY 23,88	MAY 22,88	821 854	1520 1540	1	****	1	37670	2	1	****	E
MAY 25,88	MAY 23,88	854 848	1058 1507	1	0.6	1	37671	2	1	161	CD NJHCHY
MAY 27,88	MAY 25,88	848 748	1132 1348	1	0.2	1	37696	2	1	****	NY2
MAY 28,88	MAY 27,88	748 830	1330 1943	1	10.2	1	37697	2	1	104	
MAY 30,88	MAY 28,88	830 744	1548 2233	1	0.6	1	37698	2	1	51	C Y2
MAY 31,88	MAY 30,88	744 840	1602 1603	4	****	1	37699	2	1	****	X
JUN 1,88	MAY 31,88	840 705	2001 2351	1	****	1	37700	2	1	****	X
JUN 2,88	JUN 1,88	720 905	920 1113	1	0.6	1	37727	2	1	57	C
JUN 5,88	JUN 2,88	905 848	147 157	1	0.4	1	37728	2	1	35	C NY3
JUN 6,88	JUN 5,88	848 705	700 702	1	****	1	37729	2	1	****	C X
JUN 7,88	JUN 6,88	705 712	1411 1600	1	****	1	37730	2	1	****	BC X
JUN 8,88	JUN 7,88	712 705	746 820	1	****	1	37731	2	1	****	C X
JUN 14,88	JUN 13,88	712 701	1900 600	1	0.5	1	37756	2	1	43	N
JUN 15,88	JUN 14,88	701 705	1722 1853	1	8.8	1	37757	2	1	101	
JUN 16,88	JUN 15,88	705 707	1020 1100	1	0.4	1	37758	2	1	50	A
JUN 17,88	JUN 16,88	707 727	****	4	0.2	1	37759	2	1	****	K
JUN 20,88	JUN 19,88	740 700	753 1315	1	0.3	1	37761	2	1	83	
JUN 21,88	JUN 20,88	700 705	****	1	0.2	1	37762	2	1	****	E N

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REMOVAL DATE	EXPOSURE DATE	CALCIUM	CHLORIDE	MAGNESIUM	POTASSIUM	SODIUM	AMMONIUM	FREE H+
		MG/L	MG/L	MG/L	MG/L	MG/L	AS N MG/L	LAB MG/L
APR 14,88	APR 12,88	0.32	<T	0.01	0.035	<T	0.010	0.0295
APR 15,88	APR 14,88	<T 0.04	<T	0.03	<T 0.005	<T	0.020	0.0093
APR 16,88	APR 15,88	!IS *****		0.08	!IS *****	!IS *****	!IS *****	0.0115
APR 17,88	APR 16,88	!IS *****		0.33	!IS *****	!IS *****	!IS *****	UG 0.0000
APR 18,88	APR 17,88	0.44		0.07	0.090	0.040	0.060	UG 0.0001
APR 19,88	APR 18,88	*****		*****	*****	*****	*****	*****
APR 24,88	APR 23,88	<T 0.04	<T	0.02	<T 0.005	<T	0.025	0.0148
APR 25,88	APR 24,88	*****		*****	*****	*****	*****	*****
APR 26,88	APR 25,88	0.24		0.05	0.040	0.040	0.075	0.0275
APR 27,88	APR 26,88	<T 0.04	<T	0.04	<W 0.005	<T	0.020	0.0071
APR 29,88	APR 27,88	0.16		0.10	<T 0.020	0.025	0.055	0.0513
MAY 9,88	MAY 8,88	0.90		0.28	0.170	0.170	0.235	0.0513
MAY 10,88	MAY 9,88	0.18		0.09	0.030	0.040	0.085	0.0603
MAY 11,88	MAY 10,88	<T 0.06	<T	0.02	<T 0.005	<T	0.020	0.0282
MAY 13,88	MAY 12,88	<W 0.02	<T	0.02	<W 0.005	<T	0.015	D 0.0234
MAY 14,88	MAY 13,88	!IS *****		0.08	!IS *****	!IS *****	<W 0.005	D 0.0060
MAY 15,88	MAY 14,88	0.24	<T	0.05	0.035	<T	0.035	0.0251
MAY 16,88	MAY 15,88	0.28	<T	0.04	0.040	<T	0.025	0.0178
MAY 17,88	MAY 16,88	*****		*****	*****	*****	*****	*****
MAY 20,88	MAY 17,88	<T 0.06		0.08	<T 0.010	0.055	0.040	0.0309
MAY 21,88	MAY 20,88	0.10		0.11	0.025	0.290	0.075	0.0028
MAY 22,88	MAY 21,88	0.14	!IS	*****	0.030	0.175	0.150	0.0372
MAY 23,88	MAY 22,88	*****		*****	*****	*****	*****	*****
MAY 25,88	MAY 23,88	<T 0.08		0.15	0.030	0.350	0.170	0.0005
MAY 27,88	MAY 25,88	*****		*****	*****	*****	*****	*****
MAY 28,88	MAY 27,88	0.42		0.05	0.050	0.065	0.025	0.0776
MAY 30,88	MAY 28,88	1.24		0.31	0.185	UG 0.745	0.140	!IS *****
MAY 31,88	MAY 30,88	*****		*****	*****	*****	0.730	*****
JUN 1,88	MAY 31,88	*****		*****	*****	*****	*****	*****
JUN 2,88	JUN 1,88	!IS *****		0.20	!IS *****	!IS *****	0.544	!IS *****
JUN 5,88	JUN 2,88	!IS *****		0.10	!IS *****	!IS *****	<T 0.006	0.0006
JUN 6,88	JUN 5,88	*****		*****	*****	*****	*****	*****
JUN 7,88	JUN 6,88	*****		*****	*****	*****	*****	*****
JUN 8,88	JUN 7,88	*****		*****	*****	*****	*****	*****
JUN 14,88	JUN 13,88	!IS *****		0.66	!IS *****	!IS *****	2.180	!IS *****
JUN 15,88	JUN 14,88	0.50		0.11	0.065	0.105	0.030	0.0132
JUN 16,88	JUN 15,88	!IS *****		0.16	!IS *****	!IS *****	0.118	!IS *****
JUN 17,88	JUN 16,88	*****		*****	*****	*****	*****	*****
JUN 20,88	JUN 19,88	!IS *****		0.35	!IS *****	!IS *****	1.310	0.0089
JUN 21,88	JUN 20,88	*****		*****	*****	*****	*****	*****

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : GOMGANDA/DAILY/AEROCHEM

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REMOVAL DATE	EXPOSURE DATE	SAMPLING START/END HR. HR.	PRECIP START/END HR. HR.	SAMPLE TYPE 01-RAIN 02-SNOW 03-COMP/04-OTHER	GAUGE DEPTH(MM)	GAUGE TYPE 01-STD. 02-NIPHER	SAMPLE NUMBER	PROJECT CODE 02-APIOS 03-SPECIAL	SUBPROJECT CODE 01-MOE 03-AES	SAMPLER EFFICI- ENCY (%)	COMMENTS FIELD OFFICE
JUN 22,88	JUN 21,88	705 704	1351 1412	1	0.4	1	37763	2	1	50	
JUN 23,88	JUN 22,88	704 736	717 1500	1	3.7	1	37799	2	1	107	CD HM
JUN 26,88	JUN 25,88	848 853	848 900	1	2.4	1	37805	2	1	68	CD
JUN 28,88	JUN 27,88	700 705	1720 1910	1	2.2	1	37807	2	1	95	JM
JUN 29,88	JUN 28,88	705 700	1810 1814	1	0.2	1	37808	2	1	78	
JUN 30,88	JUN 29,88	700 720	700 2300	1	3.6	1	37849	2	1	85	BC C
JUL 1,88	JUN 30,88	720 720	800 2105	1	0.3	1	37850	2	1	U 109	BCJ
JUL 4,88	JUL 2,88	730 820	839 231	1	1.2	1	37852	2	1	92	JHY2
JUL 10,88	JUL 9,88	900 857	600 730	1	0.1	1	37856	2	1	46	AE N
JUL 11,88	JUL 10,88	857 700	905 1649	1	5.1	1	37857	2	1	103	CD
JUL 12,88	JUL 11,88	700 706	1311 1338	1	****	1	37858	2	1	****	E
JUL 13,88	JUL 12,88	706 705	**** ****	4	0.1	1	37859	2	1	****	K
JUL 14,88	JUL 13,88	705 723	1535 2100	1	2.6	1	37895	2	1	171	N
JUL 15,88	JUL 14,88	723 705	1530 1531	1	****	1	37896	2	1	****	E
JUL 16,88	JUL 15,88	705 830	**** ****	1	5.8	1	37897	2	1	83	
JUL 17,88	JUL 16,88	830 827	**** ****	4	0.2	1	37898	2	1	****	KE
JUL 19,88	JUL 18,88	707 710	**** ****	4	****	1	37900	2	1	****	CE
JUL 20,88	JUL 19,88	711 803	1400 1410	1	0.2	1	37935	2	1	70	
JUL 21,88	JUL 20,88	803 703	1640 300	1	****	1	37936	2	1	****	C X
JUL 22,88	JUL 21,88	703 800	1400 1500	4	7.8	1	37937	2	1	102	CD CM
JUL 26,88	JUL 25,88	707 705	1325 1405	1	1.4	1	37940	2	1	81	CD
JUL 27,88	JUL 26,88	705 818	747 838	1	****	1	37941	2	1	****	EC
JUL 30,88	JUL 28,88	705 835	306 532	1	****	1	37963	2	1	****	E Y2
AUG 3,88	AUG 1,88	817 850	702 900	1	3.5	1	37966	2	1	104	CD JY2
AUG 4,88	AUG 3,88	850 730	1300 1430	1	26.6	1	37993	2	1	109	CD
AUG 7,88	AUG 6,88	830 915	1845 1915	1	8.6	1	83005	2	1	108	CD C
AUG 8,88	AUG 7,88	915 713	407 656	1	0.2	1	83006	2	1	23	E N
AUG 9,88	AUG 8,88	713 719	713 1430	1	2.2	1	83007	2	1	97	
AUG 10,88	AUG 9,88	719 705	1952 100	1	10.8	1	83008	2	1	109	
AUG 13,88	AUG 12,88	808 740	1800 2147	1	10.2	1	83077	2	1	107	CD
AUG 14,88	AUG 13,88	740 849	2043 547	1	22.2	1	83078	2	1	105	ACD
AUG 15,88	AUG 14,88	849 701	2002 607	1	4.9	1	83080	2	1	92	CD M
AUG 16,88	AUG 15,88	704 703	701 744	1	0.2	1	83081	2	1	23	ECD N
AUG 17,88	AUG 16,88	703 710	2041 453	1	3.0	1	83082	2	1	99	CD
AUG 18,88	AUG 17,88	710 700	710 1237	1	1.4	1	83083	2	1	98	CD HM
AUG 19,88	AUG 18,88	700 827	**** ****	4	0.2	1	83088	2	1	****	KE
AUG 20,88	AUG 19,88	827 837	1401 1437	1	5.0	1	83084	2	1	103	CD
AUG 21,88	AUG 20,88	837 905	1148 1153	1	****	1	83085	2	1	****	E
AUG 24,88	AUG 23,88	703 702	2200 2300	1	1.0	1	83087	2	1	92	CD
AUG 25,88	AUG 24,88	702 855	702 1330	1	1.4	1	83137	2	1	103	CD HM

ONTARIO MINISTRY OF THE ENVIRONMENT
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APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : GOWGANDA/DAILY/AEROCHEM

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REMOVAL DATE	EXPOSURE DATE	VOLUME ML	CONDUCT. UMHO/CM	PH FIELD	PH LAB	TOTAL H+ TO PH8.3 MG/L	TOTAL H+ GRAN MG/L	SULPHATE MG/L	NITRATE AS N MG/L
JUN 22,88	JUN 21,88	13.0	14.5	*****	4.95	*****	0.0380	1.65	0.49
JUN 23,88	JUN 22,88	255.0	10.0	4.52	4.74	*****	0.0431	0.70	0.13
JUN 26,88	JUN 25,88	106.0	24.5	4.31	4.40	*****	0.0582	2.80	0.33
JUN 28,88	JUN 27,88	135.0	6.5	4.39	4.92	*****	0.0275	0.60	<W 0.01
JUN 29,88	JUN 28,88	10.0	2.0	*****	5.82	*****	0.0143	<T 0.10	<W 0.01
JUN 30,88	JUN 29,88	197.0	4.0	5.17	5.44	*****	0.0181	<T 0.25	<T 0.03
JUL 1,88	JUN 30,88	21.0	!IS *****	*****	5.94	*****	0.0137	!IS *****	!IS *****
JUL 4,88	JUL 2,88	71.0	19.0	4.59	5.70	*****	0.0180	2.80	0.42
JUL 10,88	JUL 9,88	3.0	*****	*****	*****	*****	*****	*****	*****
JUL 11,88	JUL 10,88	338.0	32.5	4.09	4.21	*****	0.0803	3.50	0.40
JUL 12,88	JUL 11,88	1.0	*****	*****	*****	*****	*****	*****	*****
JUL 13,88	JUL 12,88	*****	*****	*****	*****	*****	*****	*****	*****
JUL 14,88	JUL 13,88	286.0	37.0	4.10	4.15	*****	0.0927	3.60	0.56
JUL 15,88	JUL 14,88	1.0	*****	*****	*****	*****	*****	*****	*****
JUL 16,88	JUL 15,88	309.0	41.5	4.05	4.17	*****	0.1020	3.30	0.75
JUL 17,88	JUL 16,88	*****	*****	*****	*****	*****	*****	*****	*****
JUL 19,88	JUL 18,88	2.0	*****	*****	*****	*****	*****	*****	*****
JUL 20,88	JUL 19,88	9.0	9.5	*****	4.75	*****	0.0612	<T 0.25	<W 0.01
JUL 21,88	JUL 20,88	4.0	*****	*****	*****	*****	*****	*****	*****
JUL 22,88	JUL 21,88	511.0	4.5	4.97	5.44	*****	0.0248	0.30	<W 0.01
JUL 26,88	JUL 25,88	73.0	15.0	4.43	4.56	*****	0.0542	1.00	0.16
JUL 27,88	JUL 26,88	2.0	*****	*****	*****	*****	*****	*****	*****
JUL 30,88	JUL 28,88	2.0	*****	*****	*****	*****	*****	*****	*****
AUG 3,88	AUG 1,88	234.0	21.0	UG 5.57	UG 6.59	*****	0.0291	3.70	0.57
AUG 4,88	AUG 3,88	1873.0	27.0	4.34	4.39	*****	0.0661	3.35	0.32
AUG 7,88	AUG 6,88	600.0	3.5	5.12	5.36	*****	0.0214	<T 0.15	<T 0.03
AUG 8,88	AUG 7,88	3.0	*****	*****	*****	*****	*****	*****	*****
AUG 9,88	AUG 8,88	138.0	25.5	4.52	4.65	*****	0.0511	3.35	0.68
AUG 10,88	AUG 9,88	761.0	7.0	4.70	4.86	*****	0.0330	0.80	0.05
AUG 13,88	AUG 12,88	706.0	5.0	5.06	5.29	*****	0.0302	0.65	0.20
AUG 14,88	AUG 13,88	1497.0	13.0	4.45	4.51	*****	0.0570	1.70	0.16
AUG 15,88	AUG 14,88	292.0	3.5	5.03	5.19	*****	0.0278	0.41	<T 0.01
AUG 16,88	AUG 15,88	3.0	*****	*****	*****	*****	*****	*****	*****
AUG 17,88	AUG 16,88	192.0	13.0	4.39	4.52	*****	0.0651	1.20	0.34
AUG 18,88	AUG 17,88	88.0	19.0	4.13	4.34	*****	0.0971	1.35	0.40
AUG 19,88	AUG 18,88	*****	*****	*****	*****	*****	*****	*****	*****
AUG 20,88	AUG 19,88	332.0	2.0	4.61	UCR 4.71	*****	UCR 0.0474	<T 0.25	<T 0.01
AUG 21,88	AUG 20,88	2.0	*****	*****	*****	*****	*****	*****	*****
AUG 24,88	AUG 23,88	59.0	80.0	*****	3.70	*****	UG 0.2540	8.20	0.99
AUG 25,88	AUG 24,88	93.0	35.0	4.05	4.26	*****	0.1150	4.10	0.22

ONTARIO MINISTRY OF THE ENVIRONMENT
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APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : GOMGANDA/DAILY/AEROCHEM

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REMOVAL DATE	EXPOSURE DATE	CALCIUM MG/L	CHLORIDE MG/L	MAGNESIUM MG/L	POTASSIUM MG/L	SODIUM MG/L	AMMONIUM AS N MG/L	FREE H+ LAB MG/L
JUN 22,88	JUN 21,88	!IS *****	0.22	!IS *****	!IS *****	!IS *****	0.386	0.0112
JUN 23,88	JUN 22,88	<T 0.06	<T 0.04	<T 0.010	<T 0.025	<T 0.010	0.138	0.0182
JUN 26,88	JUN 25,88	0.16	0.10	0.035	0.090	0.040	0.488	0.0398
JUN 28,88	JUN 27,88	<T 0.02	0.06	<T 0.015	0.055	0.030	<T 0.022	0.0120
JUN 29,88	JUN 28,88	!IS *****	0.08	!IS *****	!IS *****	!IS *****	0.016	0.0015
JUN 30,88	JUN 29,88	<T 0.06	0.15	<T 0.015	0.045	0.105	<T 0.016	0.0036
JUL 1,88	JUN 30,88	!IS *****	!IS *****	!IS *****	!IS *****	!IS *****	!IS *****	0.0011
JUL 4,88	JUL 2,88	0.98	0.47	0.250	UG 1.010	0.145	0.280	0.0020
JUL 10,88	JUL 9,88	*****	*****	*****	*****	*****	*****	*****
JUL 11,88	JUL 10,88	0.24	0.11	0.045	<T 0.015	0.035	0.476	0.0617
JUL 12,88	JUL 11,88	*****	*****	*****	*****	*****	*****	*****
JUL 13,88	JUL 12,88	*****	*****	*****	*****	*****	*****	*****
JUL 14,88	JUL 13,88	0.20	0.10	0.035	0.030	<T 0.015	0.518	0.0708
JUL 15,88	JUL 14,88	*****	*****	*****	*****	*****	*****	*****
JUL 16,88	JUL 15,88	0.28	0.18	0.040	0.050	0.050	0.460	0.0676
JUL 17,88	JUL 16,88	*****	*****	*****	*****	*****	*****	*****
JUL 19,88	JUL 18,88	*****	*****	*****	*****	*****	*****	*****
JUL 20,88	JUL 19,88	!IS *****	0.08	!IS *****	!IS *****	!IS *****	<T 0.012	0.0178
JUL 21,88	JUL 20,88	*****	*****	*****	*****	*****	*****	*****
JUL 22,88	JUL 21,88	<W 0.02	0.14	<W 0.005	<T 0.005	0.080	<T 0.010	0.0036
JUL 26,88	JUL 25,88	<T 0.06	0.08	<T 0.015	0.050	0.035	<T 0.018	0.0275
JUL 27,88	JUL 26,88	*****	*****	*****	*****	*****	*****	*****
JUL 30,88	JUL 28,88	*****	*****	*****	*****	*****	*****	*****
AUG 3,88	AUG 1,88	0.66	0.13	0.120	UG 0.860	0.060	1.020	UG 0.0003
AUG 4,88	AUG 3,88	0.36	0.08	0.055	<T 0.010	0.030	0.360	0.0407
AUG 7,88	AUG 6,88	<W 0.02	<T 0.01	<W 0.005	<T 0.010	<W 0.005	<T 0.016	0.0044
AUG 8,88	AUG 7,88	*****	*****	*****	*****	*****	*****	*****
AUG 9,88	AUG 8,88	0.34	0.16	0.070	0.035	0.045	0.994	0.0224
AUG 10,88	AUG 9,88	<W 0.02	<T 0.01	<W 0.005	<T 0.005	<T 0.005	0.052	0.0138
AUG 13,88	AUG 12,88	0.16	<T 0.02	0.025	0.030	<T 0.005	0.150	0.0051
AUG 14,88	AUG 13,88	<T 0.02	<T 0.02	<T 0.010	<T 0.005	<T 0.010	0.100	0.0309
AUG 15,88	AUG 14,88	<T 0.04	<W 0.01	<T 0.005	<T 0.020	<T 0.015	0.036	0.0065
AUG 16,88	AUG 15,88	*****	*****	*****	*****	*****	*****	*****
AUG 17,88	AUG 16,88	<T 0.10	0.07	<T 0.025	<T 0.020	0.030	0.186	0.0302
AUG 18,88	AUG 17,88	0.16	0.11	0.035	0.045	0.050	0.296	0.0457
AUG 19,88	AUG 18,88	*****	*****	*****	*****	*****	*****	*****
AUG 20,88	AUG 19,88	<T 0.02	<T 0.02	<T 0.005	UCR 0.025	<T 0.015	<T 0.016	UCR 0.0195
AUG 21,88	AUG 20,88	*****	*****	*****	*****	*****	*****	*****
AUG 24,88	AUG 23,88	0.44	0.30	0.055	0.030	0.120	0.140	0.1995
AUG 25,88	AUG 24,88	<T 0.08	<T 0.02	<T 0.010	<T 0.020	0.070	0.046	0.0550

ONTARIO MINISTRY OF THE ENVIRONMENT
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STATION NAME : GOMGANDA/DAILY/AEROCHEM

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REMOVAL DATE	EXPOSURE DATE	SAMPLING START/END HR. HR.	PRECIP START/END HR. HR.	SAMPLE TYPE 01-RAIN 02-SNOW 03-COMP/04-OTHER	GAUGE DEPTH(MM)	GAUGE TYPE 01-STD. 02-NIPHER	SAMPLE NUMBER	PROJECT CODE 02-APIOS 03-SPECIAL	SUBPROJECT CODE 01-MOE 03-AES	SAMPLER EFFICI- ENCY (%)	COMMENTS FIELD OFFICE
AUG 26,88	AUG 25,88	855 733	1521 1940	1	20.2	1	83138	2	1	103	CD M
AUG 27,88	AUG 26,88	733 831	918 926	1	1.8	1	83140	2	1	111	CD M
AUG 28,88	AUG 27,88	831 828	2112 1202	1	1.6	1	83141	2	1	90	CD HM
AUG 29,88	AUG 28,88	828 700	1601 1710	1	0.4	1	83142	2	1	195	CD NHM
AUG 30,88	AUG 29,88	700 701	2017 2107	1	0.2	1	83143	2	1	23	ECD N
AUG 31,88	AUG 30,88	701 701	1134 1327	1	0.7	1	83144	2	1	86	CDQ HM
SEP 1,88	AUG 31,88	701 836	****	4	****	1	83145	2	1	****	ECD
SEP 2,88	SEP 1,88	836 753	2216 225	1	0.6	1	83146	2	1	U 70	GCD
SEP 3,88	SEP 2,88	753 837	****	4	0.2	1	83147	2	1	****	KE
SEP 4,88	SEP 3,88	837 753	2004 2452	1	1.0	1	83148	2	1	84	CD
SEP 5,88	SEP 4,88	753 806	1014 2452	1	16.2	1	83149	2	1	100	CD
SEP 6,88	SEP 5,88	806 702	927 1856	1	2.0	1	83151	2	1	109	CD
SEP 7,88	SEP 6,88	702 812	815 835	1	0.8	1	83152	2	1	64	CDQ
SEP 9,88	SEP 7,88	812 700	2117 111	1	4.2	1	83203	2	1	92	JHY2
SEP 12,88	SEP 11,88	824 814	1526 1544	1	****	1	83206	2	1	****	E
SEP 13,88	SEP 12,88	814 824	1859 309	1	5.2	1	83207	2	1	95	CD
SEP 14,88	SEP 13,88	824 814	128 300	1	0.3	1	83208	2	1	77	NM
SEP 15,88	SEP 14,88	814 700	802 1002	1	2.5	1	83244	2	1	87	CD HM
SEP 16,88	SEP 15,88	700 815	1850 1852	1	0.2	1	83245	2	1	****	KE
SEP 17,88	SEP 16,88	815 844	49 250	1	0.3	1	83246	2	1	57	CD N
SEP 18,88	SEP 17,88	844 729	844 1720	1	5.4	1	83247	2	1	104	CD
SEP 19,88	SEP 18,88	729 819	****	4	0.2	1	83248	2	1	****	FEK
SEP 20,88	SEP 19,88	819 820	1748 2134	1	5.0	1	83249	2	1	99	CD C
SEP 21,88	SEP 20,88	820 819	1050 2330	1	8.4	1	83250	2	1	93	CD HCM
SEP 22,88	SEP 21,88	819 821	1303 1413	1	0.2	1	83251	2	1	7	E N
SEP 23,88	SEP 22,88	821 824	1104 1108	1	5.4	1	83252	2	1	103	CD C
SEP 24,88	SEP 23,88	824 830	2113 2137	1	0.2	1	83253	2	1	23	E N
SEP 26,88	SEP 24,88	830 823	1509 1630	1	3.8	1	83254	2	1	99	CDQ JHCY2
SEP 27,88	SEP 26,88	823 822	1635 2233	1	5.8	1	83255	2	1	100	CDA C
SEP 28,88	SEP 27,88	822 817	1619 1904	1	0.3	1	83256	2	1	62	C N
SEP 30,88	SEP 29,88	819 702	1444 2109	1	2.1	1	83294	2	1	106	CDQ HM
OCT 2,88	OCT 1,88	805 849	823 1923	1	22.1	1	83296	2	1	100	CDQ NHM
OCT 3,88	OCT 2,88	849 820	1308 1610	3	1.3	1	83298	2	1	94	CD JHC
OCT 9,88	OCT 7,88	701 837	1405 1437	1	0.2	1	83329	2	1	****	CDE NY2
OCT 10,88	OCT 9,88	837 825	716 825	1	0.5	1	83330	2	1	68	CD N
OCT 11,88	OCT 10,88	825 822	825 822	3	14.9	1	83331	2	1	92	BCD C
OCT 12,88	OCT 11,88	822 829	822 829	2	2.4	1	83332	2	1	39	CD N
OCT 13,88	OCT 12,88	829 820	829 1853	1	0.6	1	83333	2	1	49	CD
OCT 14,88	OCT 13,88	820 814	740 743	1	****	1	83368	2	1	****	E
OCT 17,88	OCT 14,88	814 817	2222 200	1	3.6	1	83369	2	1	98	CD CY3

ONTARIO MINISTRY OF THE ENVIRONMENT
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STATION NAME : GOMGANDA/DAILY/AEROCHEM

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REMOVAL DATE	EXPOSURE DATE	VOLUME ML	CONDUCT. UMHO/CM	PH FIELD	PH LAB	TOTAL H+ TO PH8.3 MG/L	TOTAL H+ GRAN MG/L	SULPHATE MG/L	NITRATE AS N MG/L
AUG 26,88	AUG 25,88	1339.0	4.0	4.86	5.14	*****	0.0291	0.45	<T 0.03
AUG 27,88	AUG 26,88	129.0	2.5	4.99	5.38	*****	0.0233	0.35	<T 0.02
AUG 28,88	AUG 27,88	93.0	35.5	4.14	4.33	*****	0.0989	4.20	0.59
AUG 29,88	AUG 28,88	50.0	2.0	*****	5.68	*****	0.0214	0.30	<T 0.02
AUG 30,88	AUG 29,88	3.0	*****	*****	*****	*****	*****	*****	*****
AUG 31,88	AUG 30,88	39.0	3.0	*****	5.72	*****	0.0249	<T 0.20	<T 0.02
SEP 1,88	AUG 31,88	1.0	*****	*****	*****	*****	*****	*****	*****
SEP 2,88	SEP 1,88	27.0	*****	*****	*****	*****	*****	*****	*****
SEP 3,88	SEP 2,88	*****	*****	*****	*****	*****	*****	*****	*****
SEP 4,88	SEP 3,88	54.0	*****	LG 3.56	*****	*****	*****	*****	*****
SEP 5,88	SEP 4,88	1042.0	*****	4.25	*****	*****	*****	*****	*****
SEP 6,88	SEP 5,88	141.0	*****	UG 5.25	*****	*****	*****	*****	*****
SEP 7,88	SEP 6,88	33.0	3.0	*****	!IS *****	*****	!IS *****	0.40	<T 0.04
SEP 9,88	SEP 7,88	250.0	34.0	4.01	4.88	*****	0.0615	7.70	1.09
SEP 12,88	SEP 11,88	1.0	*****	*****	*****	*****	*****	*****	*****
SEP 13,88	SEP 12,88	318.0	16.0	4.13	4.46	*****	0.0635	2.10	0.19
SEP 14,88	SEP 13,88	15.0	2.0	*****	5.35	*****	0.0243	<T 0.25	<T 0.03
SEP 15,88	SEP 14,88	140.0	2.5	UG 5.20	5.40	*****	0.0265	0.45	<T 0.04
SEP 16,88	SEP 15,88	*****	*****	*****	*****	*****	*****	*****	*****
SEP 17,88	SEP 16,88	11.0	21.0	*****	4.34	*****	0.0815	2.85	0.39
SEP 18,88	SEP 17,88	361.0	38.0	3.99	3.98	*****	0.1330	3.50	0.75
SEP 19,88	SEP 18,88	*****	*****	*****	*****	*****	*****	*****	*****
SEP 20,88	SEP 19,88	320.0	45.0	3.88	3.87	*****	0.1650	6.15	0.67
SEP 21,88	SEP 20,88	501.0	3.0	4.91	5.09	*****	0.0329	0.50	0.09
SEP 22,88	SEP 21,88	1.0	*****	*****	*****	*****	*****	*****	*****
SEP 23,88	SEP 22,88	358.0	16.5	4.25	4.30	*****	0.0773	2.10	0.31
SEP 24,88	SEP 23,88	3.0	*****	*****	*****	*****	*****	*****	*****
SEP 26,88	SEP 24,88	242.0	8.5	5.02	5.73	*****	0.0256	2.35	0.43
SEP 27,88	SEP 26,88	375.0	19.0	4.22	4.33	*****	0.0788	2.80	0.52
SEP 28,88	SEP 27,88	12.0	10.5	*****	!IR *****	*****	!IR *****	1.40	0.40
SEP 30,88	SEP 29,88	144.0	> 100.0	LG 3.59	3.55	*****	UG 0.2970	9.35	0.82
OCT 2,88	OCT 1,88	1427.0	9.5	4.51	4.58	*****	0.0460	1.10	0.10
OCT 3,88	OCT 2,88	79.0	5.0	4.78	5.44	*****	0.0245	0.70	<W 0.01
OCT 9,88	OCT 7,88	*****	*****	*****	*****	*****	*****	*****	*****
OCT 10,88	OCT 9,88	22.0	17.0	*****	!IR *****	*****	!IR *****	1.50	<T 0.02
OCT 11,88	OCT 10,88	884.0	8.0	4.39	4.68	*****	0.0474	1.20	0.19
OCT 12,88	OCT 11,88	61.0	<T 1.0	4.98	!IR *****	*****	!IR *****	<T 0.25	<W 0.01
OCT 13,88	OCT 12,88	19.0	1.5	*****	!IR *****	*****	!IR *****	0.30	<W 0.01
OCT 14,88	OCT 13,88	2.0	*****	*****	*****	*****	*****	*****	*****
OCT 17,88	OCT 14,88	227.0	13.0	4.40	4.48	*****	0.0610	2.10	0.40

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : GOWGANDA/DAILY/AEROCHEM

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REMOVAL DATE	EXPOSURE DATE	CALCIUM MG/L	CHLORIDE MG/L	MAGNESIM MG/L	POTASSIM MG/L	SODIUM MG/L	AMMONIUM AS N MG/L	FREE H+ LAB MG/L
AUG 26,88	AUG 25,88	<W 0.02	<W 0.01	<W 0.005	<W 0.005	<T 0.010	<T 0.020	0.0072
AUG 27,88	AUG 26,88	<W 0.02	<W 0.01	<W 0.005	<T 0.010	0.025	0.026	0.0042
AUG 28,88	AUG 27,88	0.36	0.14	0.130	0.025	0.075	0.330	0.0468
AUG 29,88	AUG 28,88	<T 0.10	0.10	<T 0.010	0.055	0.115	0.040	0.0021
AUG 30,88	AUG 29,88	*****	*****	*****	*****	*****	*****	*****
AUG 31,88	AUG 30,88	0.10	0.39	<T 0.015	0.070	0.325	0.036	0.0019
SEP 1,88	AUG 31,88	*****	*****	*****	*****	*****	*****	*****
SEP 2,88	SEP 1,88	*****	*****	*****	*****	*****	*****	*****
SEP 3,88	SEP 2,88	*****	*****	*****	*****	*****	*****	*****
SEP 4,88	SEP 3,88	*****	*****	*****	*****	*****	*****	*****
SEP 5,88	SEP 4,88	*****	*****	*****	*****	*****	*****	*****
SEP 6,88	SEP 5,88	*****	*****	*****	*****	*****	*****	*****
SEP 7,88	SEP 6,88	!IS *****	0.06	!IS *****	!IS *****	!IS *****	<W 0.006	!IS *****
SEP 9,88	SEP 7,88	2.12	0.23	0.250	0.335	0.110	1.470	0.0132
SEP 12,88	SEP 11,88	*****	*****	*****	*****	*****	*****	*****
SEP 13,88	SEP 12,88	0.16	<T 0.04	<T 0.020	0.220	0.040	0.220	0.0347
SEP 14,88	SEP 13,88	<T 0.06	<W 0.01	<T 0.005	<T 0.020	0.040	<T 0.006	0.0045
SEP 15,88	SEP 14,88	<T 0.08	<W 0.01	<T 0.005	0.070	0.095	0.060	0.0040
SEP 16,88	SEP 15,88	*****	*****	*****	*****	*****	*****	*****
SEP 17,88	SEP 16,88	0.42	0.16	0.040	0.055	0.205	0.226	0.0457
SEP 18,88	SEP 17,88	0.16	0.10	<T 0.020	0.085	0.040	0.256	0.1047
SEP 19,88	SEP 18,88	*****	*****	*****	*****	*****	*****	*****
SEP 20,88	SEP 19,88	0.12	0.12	<T 0.010	<T 0.025	0.065	0.600	0.1349
SEP 21,88	SEP 20,88	<T 0.02	<W 0.01	<T 0.010	<T 0.010	<T 0.010	<W 0.006	0.0081
SEP 22,88	SEP 21,88	*****	*****	*****	*****	*****	*****	*****
SEP 23,88	SEP 22,88	<T 0.04	<W 0.01	<W 0.005	<T 0.015	<T 0.020	0.186	0.0501
SEP 24,88	SEP 23,88	*****	*****	*****	*****	*****	*****	*****
SEP 26,88	SEP 24,88	0.58	<W 0.01	0.125	0.085	0.195	0.470	0.0019
SEP 27,88	SEP 26,88	0.14	0.08	0.030	0.030	0.025	0.460	0.0468
SEP 28,88	SEP 27,88	0.24	0.09	0.040	0.055	0.055	0.236	!IR *****
SEP 30,88	SEP 29,88	0.40	0.21	0.055	0.045	0.040	0.880	0.2818
OCT 2,88	OCT 1,88	<W 0.02	<W 0.01	<W 0.005	<T 0.015	<T 0.015	0.206	0.0263
OCT 3,88	OCT 2,88	0.12	<T 0.04	<T 0.015	0.045	0.075	0.056	0.0036
OCT 9,88	OCT 7,88	*****	*****	*****	*****	*****	*****	*****
OCT 10,88	OCT 9,88	0.34	0.18	0.055	0.045	0.045	0.166	!IR *****
OCT 11,88	OCT 10,88	<T 0.02	<W 0.01	<W 0.005	<T 0.010	<T 0.005	0.200	0.0209
OCT 12,88	OCT 11,88	<T 0.08	0.19	<T 0.010	0.045	0.125	0.030	!IR *****
OCT 13,88	OCT 12,88	<T 0.02	0.30	<T 0.020	0.075	0.175	0.116	!IR *****
OCT 14,88	OCT 13,88	*****	*****	*****	*****	*****	*****	*****
OCT 17,88	OCT 14,88	0.46	<W 0.01	0.080	0.050	0.030	0.210	0.0331

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REMOVAL DATE	EXPOSURE DATE	SAMPLING START/END HR. HR.	PRECIP START/END HR. HR.	SAMPLE TYPE 01-RAIN 02-SNOW 03-COMP/04-OTHER	GAUGE DEPTH(MM)	GAUGE TYPE 01-STD. 02-NIPHER	SAMPLE NUMBER	PROJECT CODE 02-APIOS 03-SPECIAL	SUBPROJECT CODE 01-MOE 03-AES	SAMPLER EFFICI- ENCY (%)	COMMENTS FIELD OFFICE
OCT 18,88	OCT 17,88	817 823	2038 823	3	37.0	1	83371	2	1	103	CD N
OCT 19,88	OCT 18,88	823 825	823 1015	2	****	1	83372	2	1	****	E
OCT 20,88	OCT 19,88	825 825	2000 2012	2	0.2	1	83411	2	1	46	CDE N
OCT 21,88	OCT 20,88	825 820	1340 1653	2	****	1	83412	2	1	****	CDE
OCT 22,88	OCT 21,88	820 856	1024 2100	1	2.8	1	83413	2	1	100	CD
OCT 24,88	OCT 22,88	856 825	123 825	3	2.4	1	83414	2	1	134	CD NY2
OCT 25,88	OCT 24,88	825 823	825 1130	3	6.6	1	83415	2	1	98	CD M
OCT 26,88	OCT 25,88	823 820	823 842	3	0.6	1	83416	2	1	38	CD M
OCT 27,88	OCT 26,88	820 825	1716 1722	3	****	1	83427	2	1	****	E
OCT 28,88	OCT 27,88	825 820	1926 820	3	8.6	1	83428	2	1	103	CD JHM
OCT 29,88	OCT 28,88	820 842	914 1147	3	0.6	1	83429	2	1	104	CD
OCT 30,88	OCT 29,88	842 844	2200 418	2	****	1	83430	2	1	****	E
OCT 31,88	OCT 30,88	844 826	509 510	2	0.2	1	83431	2	1	15	CDE N
NOV 1,88	OCT 31,88	826 849	1001 850	3	7.2	1	83432	2	1	81	CD
NOV 2,88	NOV 1,88	849 841	850 1025	3	****	1	83433	2	1	****	CDE
NOV 4,88	NOV 2,88	841 847	2200 847	1	****	1	83479	2	1	****	JCD Z
NOV 11,88	NOV 10,88	840 833	840 1635	2	9.6	2	83480	2	1	76	CD
NOV 13,88	NOV 11,88	833 850	259 850	2	6.7	2	83481	2	1	55	CD NZ
NOV 14,88	NOV 13,88	850 750	1245 1601	3	4.0	2	83482	2	1	108	CD
NOV 15,88	NOV 14,88	750 825	825 1217	1	****	2	83483	2	1	****	CD
NOV 16,88	NOV 15,88	825 700	1608 1805	3	6.4	2	83484	2	1	89	CD
NOV 17,88	NOV 16,88	700 840	1122 1434	3	1.4	2	83485	2	1	182	CD N
NOV 18,88	NOV 17,88	840 840	****	2	0.4	2	83517	2	1	****	KE
NOV 20,88	NOV 18,88	840 909	1700 1727	2	1.0	2	83518	2	1	4	E NZ
NOV 21,88	NOV 20,88	909 817	1438 1539	2	1.2	2	83519	2	1	54	CD
NOV 24,88	NOV 21,88	817 702	2307 151	2	1.0	2	83520	2	1	87	CD Z
NOV 27,88	NOV 24,88	702 843	1542 843	1	7.4	2	83579	2	1	107	CD Z
NOV 28,88	NOV 27,88	843 825	843 825	3	7.6	2	83580	2	1	104	CD
NOV 29,88	NOV 28,88	825 836	825 230	2	1.9	2	83581	2	1	55	BCD NJ
NOV 30,88	NOV 29,88	836 824	2217 824	2	4.0	2	83582	2	1	76	CD
DEC 2,88	NOV 30,88	824 827	837 1133	2	1.6	2	83583	2	1	U 98	CDF Z
DEC 4,88	DEC 2,88	827 913	951 1900	2	0.7	2	83584	2	1	49	CD Z
DEC 5,88	DEC 4,88	913 827	913 1438	2	****	2	83585	2	1	****	E
DEC 6,88	DEC 5,88	827 821	850 923	2	****	2	83586	2	1	****	E
DEC 7,88	DEC 6,88	821 836	2152 27	4	0.4	2	83587	2	1	105	CD
DEC 8,88	DEC 7,88	836 845	836 910	2	****	2	83622	2	1	****	EJ
DEC 9,88	DEC 8,88	845 700	2133 634	2	0.6	2	83623	2	1	U 59	CDJ
DEC 11,88	DEC 9,88	700 828	1321 1502	2	****	2	83624	2	1	****	CD Z
DEC 12,88	DEC 11,88	828 824	852 906	2	****	2	83625	2	1	****	EK
DEC 13,88	DEC 12,88	824 829	320 829	2	1.0	2	83626	2	1	67	CD

ONTARIO MINISTRY OF THE ENVIRONMENT
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STATION NAME : GOWGANDA/DAILY/AEROCHEM

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REMOVAL DATE	EXPOSURE DATE	VOLUME ML	CONDUCT. UMHO/CM	PH FIELD	PH LAB	TOTAL H+ TO PH8.3 MG/L	TOTAL H+ GRAN MG/L	SULPHATE MG/L	NITRATE AS N MG/L
OCT 18,88	OCT 17,88	2449.0	3.5	4.70	4.92	*****	0.0340	0.55	0.08
OCT 19,88	OCT 18,88	2.0	*****	*****	*****	*****	*****	*****	*****
OCT 20,88	OCT 19,88	6.0	*****	*****	*****	*****	*****	*****	*****
OCT 21,88	OCT 20,88	4.0	*****	*****	*****	*****	*****	*****	*****
OCT 22,88	OCT 21,88	180.0	61.0	3.72	3.81	*****	0.1900	1.75	1.88
OCT 24,88	OCT 22,88	207.0	24.5	4.05	4.23	*****	0.0837	1.15	0.71
OCT 25,88	OCT 24,88	415.0	14.5	4.29	4.43	*****	0.0603	1.40	<T 0.04
OCT 26,88	OCT 25,88	15.0	2.0	*****	5.33	*****	0.0236	0.35	<W 0.01
OCT 27,88	OCT 26,88	2.0	*****	*****	*****	*****	*****	*****	*****
OCT 28,88	OCT 27,88	571.0	11.0	4.00	4.60	*****	0.0455	0.80	<W 0.01
OCT 29,88	OCT 28,88	40.0	5.0	*****	4.98	*****	0.0323	0.45	0.16
OCT 30,88	OCT 29,88	4.0	*****	*****	*****	*****	*****	*****	*****
OCT 31,88	OCT 30,88	2.0	*****	*****	*****	*****	*****	*****	*****
NOV 1,88	OCT 31,88	378.0	28.0	3.80	4.16	*****	0.0947	1.15	0.85
NOV 2,88	NOV 1,88	8.0	*****	*****	*****	*****	*****	*****	*****
NOV 4,88	NOV 2,88	16.0	84.5	*****	3.81	*****	UG 0.2360	8.45	!IS *****
NOV 11,88	NOV 10,88	469.0	5.0	4.78	4.89	*****	0.0313	0.55	LG 0.06
NOV 13,88	NOV 11,88	237.0	16.5	4.34	4.42	*****	0.0645	1.05	0.44
NOV 14,88	NOV 13,88	278.0	22.5	4.27	4.31	*****	0.0778	1.80	0.49
NOV 15,88	NOV 14,88	30.0	13.5	*****	3.62	*****	UG 0.2780	1.60	0.37
NOV 16,88	NOV 15,88	366.0	25.0	4.18	4.19	*****	0.0952	2.80	0.43
NOV 17,88	NOV 16,88	164.0	16.0	4.41	4.47	*****	0.0599	2.10	0.24
NOV 18,88	NOV 17,88	*****	*****	*****	*****	*****	*****	*****	*****
NOV 20,88	NOV 18,88	3.0	*****	*****	*****	*****	*****	*****	*****
NOV 21,88	NOV 20,88	42.0	72.0	*****	!IS *****	*****	!IS *****	5.90	1.83
NOV 24,88	NOV 21,88	56.0	37.0	4.09	!IS *****	*****	!IS *****	3.05	1.44
NOV 27,88	NOV 24,88	512.0	47.0	3.97	4.05	*****	0.1180	3.55	0.70
NOV 28,88	NOV 27,88	507.0	7.0	4.65	4.83	*****	0.0338	0.60	0.15
NOV 29,88	NOV 28,88	68.0	!IS *****	4.95	UG 5.72	*****	0.0192	!IR *****	!IR *****
NOV 30,88	NOV 29,88	197.0	20.5	4.28	4.32	*****	0.0666	LG 0.15	0.73
DEC 2,88	NOV 30,88	101.0	!IS *****	4.18	4.22	*****	0.0842	1.00	0.80
DEC 4,88	DEC 2,88	22.0	!IS *****	*****	4.89	*****	0.0329	!IS *****	!IS *****
DEC 5,88	DEC 4,88	1.0	*****	*****	*****	*****	*****	*****	*****
DEC 6,88	DEC 5,88	1.0	*****	*****	*****	*****	*****	*****	*****
DEC 7,88	DEC 6,88	27.0	!IS *****	*****	4.79	*****	0.0393	!IS *****	!IS *****
DEC 8,88	DEC 7,88	1.0	*****	*****	*****	*****	*****	*****	*****
DEC 9,88	DEC 8,88	23.0	!IS *****	*****	UG 6.19	*****	0.0166	!IS *****	!IS *****
DEC 11,88	DEC 9,88	10.0	!IS *****	*****	UG 5.66	*****	0.0189	!IS *****	!IS *****
DEC 12,88	DEC 11,88	1.0	*****	*****	*****	*****	*****	*****	*****
DEC 13,88	DEC 12,88	43.0	!IS *****	*****	4.27	*****	0.0670	!IS *****	!IS *****

ONTARIO MINISTRY OF THE ENVIRONMENT
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REMOVAL DATE	EXPOSURE DATE	CALCIUM MG/L	CHLORIDE MG/L	MAGNESIUM MG/L	POTASSIUM MG/L	SODIUM MG/L	AMMONIUM AS N MG/L	FREE H+ LAB MG/L
OCT 18,88	OCT 17,88	<W 0.02	<W 0.01	<W 0.005	<W 0.005	<W 0.005	!SM *****	0.0120
OCT 19,88	OCT 18,88	*****	*****	*****	*****	*****	*****	*****
OCT 20,88	OCT 19,88	*****	*****	*****	*****	*****	*****	*****
OCT 21,88	OCT 20,88	*****	*****	*****	*****	*****	*****	*****
OCT 22,88	OCT 21,88	0.20	0.33	<T 0.020	<T 0.010	0.030	0.060	0.1549
OCT 24,88	OCT 22,88	<T 0.02	<W 0.01	<T 0.010	<T 0.015	<T 0.015	0.100	0.0589
OCT 25,88	OCT 24,88	<T 0.02	<W 0.01	<W 0.005	<W 0.005	<W 0.005	0.070	0.0372
OCT 26,88	OCT 25,88	<T 0.04	<T 0.02	<T 0.010	<T 0.020	0.035	<T 0.016	0.0047
OCT 27,88	OCT 26,88	*****	*****	*****	*****	*****	*****	*****
OCT 28,88	OCT 27,88	<W 0.02	<W 0.01	<W 0.005	<W 0.005	<W 0.005	0.070	0.0251
OCT 29,88	OCT 28,88	!IS *****	<T 0.02	!IS *****	!IS *****	!IS *****	0.126	0.0105
OCT 30,88	OCT 29,88	*****	*****	*****	*****	*****	*****	*****
OCT 31,88	OCT 30,88	*****	*****	*****	*****	*****	*****	*****
NOV 1,88	OCT 31,88	<T 0.08	0.10	<T 0.015	<W 0.005	<W 0.005	0.156	0.0692
NOV 2,88	NOV 1,88	*****	*****	*****	*****	*****	*****	*****
NOV 4,88	NOV 2,88	!IS *****	0.63	!IS *****	!IS *****	!IS *****	1.050	0.1549
NOV 11,88	NOV 10,88	<W 0.02	<T 0.03	<W 0.005	<W 0.005	<T 0.005	0.030	0.0129
NOV 13,88	NOV 11,88	<T 0.02	0.07	<W 0.005	<T 0.010	<T 0.010	0.150	0.0380
NOV 14,88	NOV 13,88	<T 0.04	0.08	<T 0.005	<T 0.010	<T 0.015	0.250	0.0490
NOV 15,88	NOV 14,88	!IS *****	0.14	!IS *****	!IS *****	!IS *****	0.380	0.2399
NOV 16,88	NOV 15,88	0.26	0.19	<T 0.020	<T 0.025	0.085	0.220	0.0646
NOV 17,88	NOV 16,88	0.28	0.08	<T 0.020	0.025	0.025	0.096	0.0339
NOV 18,88	NOV 17,88	*****	*****	*****	*****	*****	*****	*****
NOV 20,88	NOV 18,88	*****	*****	*****	*****	*****	*****	*****
NOV 21,88	NOV 20,88	0.12	0.38	<T 0.020	0.075	0.135	0.176	!IS *****
NOV 24,88	NOV 21,88	0.20	0.46	<T 0.020	0.030	0.100	0.610	!IS *****
NOV 27,88	NOV 24,88	0.18	0.20	<T 0.015	0.030	0.060	0.270	0.0891
NOV 28,88	NOV 27,88	<W 0.02	<T 0.05	<W 0.005	<T 0.010	<T 0.010	0.076	0.0148
NOV 29,88	NOV 28,88	<T 0.06	0.31	<T 0.015	0.055	0.105	0.076	UG 0.0019
NOV 30,88	NOV 29,88	<T 0.02	0.10	<W 0.005	<T 0.005	<T 0.015	0.030	0.0479
DEC 2,88	NOV 30,88	<T 0.04	0.17	<T 0.005	<T 0.015	0.040	0.156	0.0603
DEC 4,88	DEC 2,88	0.16	!IS *****	0.035	0.060	0.200	0.310	0.0129
DEC 5,88	DEC 4,88	*****	*****	*****	*****	*****	*****	*****
DEC 6,88	DEC 5,88	*****	*****	*****	*****	*****	*****	*****
DEC 7,88	DEC 6,88	0.14	!IS *****	<T 0.020	0.050	0.095	0.496	0.0162
DEC 8,88	DEC 7,88	*****	*****	*****	*****	*****	*****	*****
DEC 9,88	DEC 8,88	0.32	!IS *****	0.040	0.040	0.270	0.026	UG 0.0006
DEC 11,88	DEC 9,88	0.12	!IS *****	<T 0.020	0.050	0.250	0.026	UG 0.0022
DEC 12,88	DEC 11,88	*****	*****	*****	*****	*****	*****	*****
DEC 13,88	DEC 12,88	0.24	!IS *****	0.060	0.035	0.190	0.056	0.0537

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STATION NAME : GOWGANDA/DAILY/AEROCHEM

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REMOVAL DATE	EXPOSURE DATE	SAMPLING START/END HR. HR.	PRECIP START/END HR. HR.	SAMPLE TYPE 01-RAIN 02-SNOW 03-COMP/04-OTHER	GAUGE DEPTH(MM)	GAUGE TYPE 01-STD. 02-NIPHER	SAMPLE NUMBER	PROJECT CODE 02-APIOS 03-SPECIAL	SUBPROJECT CODE 01-MOE 03-AES	SAMPLER EFFICI- ENCY (%)	COMMENTS FIELD OFFICE
DEC 14,88	DEC 13,88	829 827	829 827	4	0.9	2	83627	2	1	60	CD
DEC 15,88	DEC 14,88	827 904	827 1401	2	15.0	2	83679	2	1	20	CD NM
DEC 17,88	DEC 16,88	826 848	230 848	2	0.4	2	83681	2	1	U 97	CDJ
DEC 18,88	DEC 17,88	848 936	848 1518	2	0.5	2	83682	2	1	U 59	CDJ
DEC 20,88	DEC 19,88	826 843	2200 843	2	5.4	2	83684	2	1	104	CD
DEC 21,88	DEC 20,88	843 839	843 318	2	9.4	2	83685	2	1	93	CD
DEC 23,88	DEC 21,88	839 811	511 811	2	1.6	2	83686	2	1	61	CD NZ
DEC 24,88	DEC 23,88	811 846	811 930	2	****	2	83687	2	1	****	JCDE
DEC 27,88	DEC 25,88	850 817	620 817	2	0.8	2	83689	2	1	U 132	JCD JZ
DEC 28,88	DEC 27,88	817 708	817 1700	1	3.8	2	83690	2	1	U 50	JF
DEC 29,88	DEC 28,88	708 857	708 936	4	0.2	2	83691	2	1	U 31	JE
DEC 30,88	DEC 29,88	857 926	2247 2345	2	1.2	2	83770	2	1	92	CD
DEC 31,88	DEC 30,88	926 835	926 1350	2	1.4	2	83771	2	1	U 61	JFCD

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : GOWGANDA/DAILY/AEROCHEM

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REMOVAL DATE	EXPOSURE DATE	VOLUME ML	CONDUCT. UMHO/CM	PH FIELD	PH LAB	TOTAL H+ TO PH8.3 MG/L	TOTAL H+ GRAN MG/L	SULPHATE MG/L	NITRATE AS N MG/L
DEC 14,88	DEC 13,88	35.0	!IS *****	*****	4.19	*****	0.0827	!IS *****	!IS *****
DEC 15,88	DEC 14,88	201.0	16.5	4.40	4.41	*****	0.0504	0.50	0.47
DEC 17,88	DEC 16,88	25.0	!IS *****	*****	4.85	*****	0.0296	!IS *****	!IS *****
DEC 18,88	DEC 17,88	19.0	!IS *****	*****	4.89	*****	0.0304	!IS *****	!IS *****
DEC 20,88	DEC 19,88	361.0	25.0	4.33	4.28	*****	0.0672	1.25	0.97
DEC 21,88	DEC 20,88	563.0	23.0	4.33	4.27	*****	0.0730	1.95	0.42
DEC 23,88	DEC 21,88	63.0	!IS *****	4.67	4.59	*****	0.0431	!IS *****	!IS *****
DEC 24,88	DEC 23,88	5.0	*****	*****	*****	*****	*****	*****	*****
DEC 27,88	DEC 25,88	68.0	!IS *****	UG 5.07	UG 5.61	*****	0.0188	!IS *****	!IS *****
DEC 28,88	DEC 27,88	124.0	7.5	4.71	4.68	*****	0.0343	0.85	0.11
DEC 29,88	DEC 28,88	4.0	*****	*****	*****	*****	*****	*****	*****
DEC 30,88	DEC 29,88	71.0	8.0	4.29	4.72	*****	0.0391	0.30	0.38
DEC 31,88	DEC 30,88	55.0	22.0	3.95	4.32	*****	0.0810	0.65	1.00

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : GOWGANDA/DAILY/AEROCHEM

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REMOVAL DATE	EXPOSURE DATE	CALCIUM MG/L	CHLORIDE MG/L	MAGNESIUM MG/L	POTASSIUM MG/L	SODIUM MG/L	AMMONIUM AS N MG/L	FREE H+ LAB MG/L
DEC 14,88	DEC 13,88	0.22	!IS *****	0.030	<W 0.005	0.540	0.196	0.0646
DEC 15,88	DEC 14,88	<T 0.04	<W 0.01	<T 0.010	<T 0.015	0.070	0.116	0.0389
DEC 17,88	DEC 16,88	0.10	!IS *****	<T 0.010	0.040	0.105	<T 0.020	0.0141
DEC 18,88	DEC 17,88	0.12	!IS *****	<T 0.010	0.085	0.215	<T 0.020	0.0129
DEC 20,88	DEC 19,88	0.38	0.23	0.050	0.025	0.100	0.410	0.0525
DEC 21,88	DEC 20,88	0.12	0.17	<T 0.010	0.030	0.065	0.306	0.0537
DEC 23,88	DEC 21,88	0.14	!IS *****	<T 0.020	0.030	0.105	0.090	0.0257
DEC 24,88	DEC 23,88	*****	*****	*****	*****	*****	*****	*****
DEC 27,88	DEC 25,88	0.14	!IS *****	<T 0.010	<T 0.015	0.135	<T 0.016	UG 0.0025
DEC 28,88	DEC 27,88	0.10	0.11	<T 0.005	<T 0.010	0.060	0.036	0.0209
DEC 29,88	DEC 28,88	*****	*****	*****	*****	*****	*****	*****
DEC 30,88	DEC 29,88	0.14	0.18	<T 0.005	<T 0.010	0.095	<W 0.002	0.0191
DEC 31,88	DEC 30,88	0.50	0.35	0.030	0.060	0.110	!IS *****	0.0479

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : HIGH FALLS/DAILY/AEROCHEM

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REMOVAL DATE	EXPOSURE DATE	SAMPLING START/END HR. HR.	PRECIP START/END HR. HR.	SAMPLE TYPE 01-RAIN 02-SNOW 03-COMP/04-OTHER	GAUGE DEPTH(MM)	GAUGE TYPE 01-STD. 02-NIPHER	SAMPLE NUMBER	PROJECT CODE 02-APIOS 03-SPECIAL	SUBPROJECT CODE 01-MOE 03-AES	SAMPLER EFFICI- ENCY (%)	COMMENTS FIELD OFFICE
APR 14,88	APR 12,88	1545 600	**** ****	1	6.2	1	37528	2	1	114	Y2
APR 15,88	APR 14,88	600 615	**** ****	3	5.0	1	37529	2	1	89	
APR 16,88	APR 15,88	615 900	**** ****	3	1.0	2	37530	2	1	U 1	G X
APR 17,88	APR 16,88	900 1000	**** ****	3	2.0	2	37531	2	1	81	
APR 18,88	APR 17,88	1000 630	**** ****	3	5.2	2	37532	2	1	62	
APR 19,88	APR 18,88	630 620	**** ****	2	4.6	2	37533	2	1	11	N
APR 21,88	APR 19,88	620 630	**** ****	3	0.1	2	37576	2	1	****	E NY2
APR 24,88	APR 22,88	630 1030	**** ****	3	12.4	2	37578	2	1	****	FE Y2
APR 27,88	APR 25,88	1030 630	**** ****	3	0.1	2	37580	2	1	U 4633	CFKE Y2
APR 28,88	APR 27,88	630 941	151 732	3	0.1	2	37581	2	1	U 514	F
APR 29,88	APR 28,88	941 854	1554 2214	1	0.1	2	37582	2	1	U 249	F
MAY 9,88	MAY 7,88	1000 630	400 630	1	0.1	2	37629	2	1	686	NY2
MAY 10,88	MAY 9,88	630 630	122 618	1	8.6	2	37630	2	1	U 100	P
MAY 11,88	MAY 10,88	630 645	635 1032	1	7.8	2	37631	2	1	U 91	P
MAY 12,88	MAY 11,88	645 630	2205 2248	1	0.8	1	37632	2	1	7	E N
MAY 15,88	MAY 14,88	645 930	430 700	1	5.4	1	37635	2	1	104	J
MAY 16,88	MAY 15,88	930 629	953 1130	1	0.2	1	37636	2	1	62	H
MAY 17,88	MAY 16,88	629 917	1230 1400	1	1.2	1	37637	2	1	96	
MAY 21,88	MAY 20,88	730 1000	800 1200	1	1.8	1	37674	2	1	87	CD H
MAY 22,88	MAY 21,88	1000 835	1000 1300	1	2.2	1	37675	2	1	97	C
MAY 23,88	MAY 22,88	835 630	1600 1708	1	0.4	1	37676	2	1	77	
MAY 25,88	MAY 23,88	630 642	2000 2230	1	0.1	1	37693	2	1	109	Y2
MAY 27,88	MAY 25,88	642 640	1230 1400	1	0.2	1	37694	2	1	31	C XNY2
MAY 31,88	MAY 29,88	1415 714	1500 2330	1	0.1	1	37701	2	1	46	XNY2
JUN 1,88	MAY 31,88	714 657	2000 300	1	5.7	1	37718	2	1	105	Q JC
JUN 3,88	JUN 1,88	657 637	1151 1339	1	****	1	37719	2	1	****	Q XY2
JUN 5,88	JUN 3,88	637 855	**** ****	1	****	1	37720	2	1	****	XY2
JUN 7,88	JUN 5,88	855 944	1503 1552	1	2.0	1	37721	2	1	81	QC JHCY2
JUN 16,88	JUN 12,88	945 756	2059 2337	1	0.2	1	37752	2	1	15	XNY4
JUN 20,88	JUN 16,88	756 955	2059 2337	1	1.2	1	37753	2	1	71	JY4
JUN 22,88	JUN 20,88	955 645	200 645	1	0.2	1	37809	2	1	62	Y2
JUN 23,88	JUN 22,88	645 959	645 1200	1	5.4	1	37810	2	1	U 94	GCD H
JUN 28,88	JUN 26,88	1247 948	2049 2320	1	0.1	1	37816	2	1	31	E NY2
JUN 30,88	JUN 28,88	948 830	2016 114	1	0.6	1	37866	2	1	78	Y2
JUL 1,88	JUN 30,88	830 1000	1705 1800	1	0.2	1	37867	2	1	U 23	I X
JUL 11,88	JUL 8,88	905 929	1046 1230	1	6.6	1	37871	2	1	97	BC Y3
JUL 12,88	JUL 11,88	929 942	1350 1518	1	8.8	1	37872	2	1	99	ACD J
JUL 14,88	JUL 13,88	842 932	1630 2200	1	7.2	1	37890	2	1	99	
JUL 15,88	JUL 14,88	932 920	**** ****	1	0.4	1	37891	2	1	U 7	PE
JUL 16,88	JUL 15,88	920 935	1221 1424	1	2.0	1	37892	2	1	95	JHM

ONTARIO MINISTRY OF THE ENVIRONMENT
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APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : HIGH FALLS/DAILY/AEROCHEM

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REMOVAL DATE	EXPOSURE DATE	VOLUME ML	CONDUCT. UMHO/CM	PH FIELD	PH LAB	TOTAL H+ TO PH8.3 MG/L	TOTAL H+ GRAN MG/L	SULPHATE MG/L	NITRATE AS N MG/L
APR 14,88	APR 12,88	456.0	37.0	*****	4.28	*****	0.0801	5.05	0.93
APR 15,88	APR 14,88	286.0	13.0	*****	4.73	*****	0.0363	1.15	0.21
APR 16,88	APR 15,88	1.0	*****	*****	*****	*****	*****	*****	*****
APR 17,88	APR 16,88	104.0	29.0	*****	UG 7.40	*****	0.0140	2.70	0.53
APR 18,88	APR 17,88	208.0	26.0	*****	UG 7.35	*****	0.0166	2.35	0.74
APR 19,88	APR 18,88	34.0	!IS *****	*****	5.18	*****	0.0236	!IS *****	!IS *****
APR 21,88	APR 19,88	*****	*****	*****	*****	*****	*****	*****	*****
APR 24,88	APR 22,88	*****	*****	*****	*****	*****	*****	*****	*****
APR 27,88	APR 25,88	297.0	*****	*****	*****	*****	*****	*****	*****
APR 28,88	APR 27,88	33.0	88.0	*****	3.76	*****	UG 0.2620	5.20	2.35
APR 29,88	APR 28,88	16.0	19.5	*****	4.48	*****	0.0668	1.95	0.45
MAY 9,88	MAY 7,88	44.0	!IS *****	*****	3.63	*****	UG 0.3470	!IS *****	!IS *****
MAY 10,88	MAY 9,88	553.0	34.0	4.12	4.24	*****	0.0980	3.10	0.62
MAY 11,88	MAY 10,88	455.0	12.5	4.51	4.66	*****	0.0549	1.15	0.21
MAY 12,88	MAY 11,88	4.0	*****	*****	*****	*****	*****	*****	*****
MAY 15,88	MAY 14,88	362.0	25.0	4.52	5.40	*****	0.0375	4.00	0.93
MAY 16,88	MAY 15,88	8.0	9.0	*****	5.48	*****	0.0248	1.30	0.28
MAY 17,88	MAY 16,88	74.0	20.0	4.49	4.84	*****	0.0474	3.40	0.57
MAY 21,88	MAY 20,88	101.0	28.5	4.02	4.33	*****	0.0899	7.00	<T 0.03
MAY 22,88	MAY 21,88	138.0	29.5	4.17	4.24	*****	0.0888	3.10	0.15
MAY 23,88	MAY 22,88	20.0	!IS *****	*****	UG 7.16	*****	0.0275	!IS *****	!IS *****
MAY 25,88	MAY 23,88	7.0	4.0	*****	!IS *****	*****	!IS *****	<T 0.15	<W 0.01
MAY 27,88	MAY 25,88	4.0	*****	*****	*****	*****	*****	*****	*****
MAY 31,88	MAY 29,88	3.0	*****	*****	*****	*****	*****	*****	*****
JUN 1,88	MAY 31,88	386.0	30.0	4.08	5.02	*****	0.0642	4.80	0.30
JUN 3,88	JUN 1,88	3.0	*****	*****	*****	*****	*****	*****	*****
JUN 5,88	JUN 3,88	1.0	*****	*****	*****	*****	*****	*****	*****
JUN 7,88	JUN 5,88	105.0	9.5	4.23	5.97	*****	0.0214	0.95	0.27
JUN 16,88	JUN 12,88	2.0	*****	*****	*****	*****	*****	*****	*****
JUN 20,88	JUN 16,88	55.0	50.0	4.17	5.27	*****	0.0379	8.75	1.72
JUN 22,88	JUN 20,88	8.0	9.0	*****	5.50	*****	0.0201	0.85	0.28
JUN 23,88	JUN 22,88	328.0	13.5	4.53	4.77	*****	0.0340	1.40	0.30
JUN 28,88	JUN 26,88	2.0	*****	*****	*****	*****	*****	*****	*****
JUN 30,88	JUN 28,88	30.0	4.5	*****	5.98	*****	0.0168	0.40	<W 0.01
JUL 1,88	JUN 30,88	3.0	*****	*****	*****	*****	*****	*****	*****
JUL 11,88	JUL 8,88	412.0	34.5	4.11	4.18	*****	0.0819	3.65	0.56
JUL 12,88	JUL 11,88	561.0	4.5	4.68	5.81	*****	0.0199	0.45	0.08
JUL 14,88	JUL 13,88	458.0	43.5	4.11	4.14	*****	0.0922	4.65	0.91
JUL 15,88	JUL 14,88	2.0	*****	*****	*****	*****	*****	*****	*****
JUL 16,88	JUL 15,88	123.0	10.5	4.53	5.58	*****	0.0205	1.05	0.37

ONTARIO MINISTRY OF THE ENVIRONMENT
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APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : HIGH FALLS/DAILY/AEROCHEM

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REMOVAL DATE	EXPOSURE DATE	CALCIUM MG/L	CHLORIDE MG/L	MAGNESIUM MG/L	POTASSIUM MG/L	SODIUM MG/L	AMMONIUM AS N MG/L	FREE H+ LAB MG/L
APR 14,88	APR 12,88	0.80	0.16	0.135	0.060	0.145	1.060	0.0525
APR 15,88	APR 14,88	<T 0.06	<T 0.03	<T 0.010	<T 0.015	0.025	0.240	0.0186
APR 16,88	APR 15,88	*****	*****	*****	*****	*****	*****	*****
APR 17,88	APR 16,88	1.16	0.24	UG 0.200	0.150	0.200	1.960	UG 0.0000
APR 18,88	APR 17,88	UG 1.68	0.12	UG 0.220	0.145	0.140	1.230	UG 0.0000
APR 19,88	APR 18,88	0.40	!IS *****	0.045	0.030	0.080	!IS *****	0.0066
APR 21,88	APR 19,88	*****	*****	*****	*****	*****	*****	*****
APR 24,88	APR 22,88	*****	*****	*****	*****	*****	*****	*****
APR 27,88	APR 25,88	*****	*****	*****	*****	*****	*****	*****
APR 28,88	APR 27,88	0.54	0.57	0.075	0.090	0.130	0.430	0.1738
APR 29,88	APR 28,88	0.40	0.19	0.050	0.140	0.135	<T 0.010	0.0331
MAY 9,88	MAY 7,88	!IS *****	!IS *****	!IS *****	!IS *****	!IS *****	1.525	0.2344
MAY 10,88	MAY 9,88	0.18	0.11	0.030	0.040	<T 0.005	0.400	0.0575
MAY 11,88	MAY 10,88	<T 0.02	<T 0.03	<W 0.005	0.035	0.030	0.125	0.0219
MAY 12,88	MAY 11,88	*****	*****	*****	*****	*****	*****	*****
MAY 15,88	MAY 14,88	1.32	0.18	0.170	0.085	0.060	0.925	0.0040
MAY 16,88	MAY 15,88	0.38	0.08	0.045	0.055	0.045	0.200	0.0033
MAY 17,88	MAY 16,88	0.66	0.15	0.115	0.130	0.145	0.675	0.0145
MAY 21,88	MAY 20,88	0.24	0.25	0.130	U 1.750	0.120	0.725	0.0468
MAY 22,88	MAY 21,88	<T 0.10	<T 0.04	<T 0.010	<W 0.005	0.025	<W 0.005	0.0575
MAY 23,88	MAY 22,88	<T 0.06	!IS *****	0.070	UG 0.805	0.105	1.550	UG 0.0001
MAY 25,88	MAY 23,88	0.12	0.12	<T 0.025	0.175	0.100	<T 0.005	!IS *****
MAY 27,88	MAY 25,88	*****	*****	*****	*****	*****	*****	*****
MAY 31,88	MAY 29,88	*****	*****	*****	*****	*****	*****	*****
JUN 1,88	MAY 31,88	0.44	0.14	0.090	UG 0.550	0.045	0.979	0.0095
JUN 3,88	JUN 1,88	*****	*****	*****	*****	*****	*****	*****
JUN 5,88	JUN 3,88	*****	*****	*****	*****	*****	*****	*****
JUN 7,88	JUN 5,88	0.34	0.08	0.080	0.205	<T 0.025	0.080	0.0011
JUN 16,88	JUN 12,88	*****	*****	*****	*****	*****	*****	*****
JUN 20,88	JUN 16,88	!IS *****	0.61	!IS *****	!IS *****	!IS *****	1.950	0.0054
JUN 22,88	JUN 20,88	!IS *****	0.15	!IS *****	!IS *****	!IS *****	0.218	0.0032
JUN 23,88	JUN 22,88	0.16	0.09	0.025	0.040	0.025	0.424	0.0170
JUN 28,88	JUN 26,88	*****	*****	*****	*****	*****	*****	*****
JUN 30,88	JUN 28,88	!IS *****	0.31	!IS *****	!IS *****	!IS *****	<T 0.012	0.0010
JUL 1,88	JUN 30,88	*****	*****	*****	*****	*****	*****	*****
JUL 11,88	JUL 8,88	0.50	0.16	0.105	0.040	0.055	0.468	0.0661
JUL 12,88	JUL 11,88	<T 0.06	<T 0.05	<T 0.015	0.095	<T 0.010	!CR *****	0.0015
JUL 14,88	JUL 13,88	0.72	0.19	0.145	0.050	0.035	D 0.736	0.0724
JUL 15,88	JUL 14,88	*****	*****	*****	*****	*****	*****	*****
JUL 16,88	JUL 15,88	0.28	0.16	0.040	0.215	0.090	0.564	0.0026

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : HIGH FALLS/DAILY/AEROCHEM

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REMOVAL DATE	EXPOSURE DATE	SAMPLING START/END HR. HR.	PRECIP START/END HR. HR.	SAMPLE TYPE 01-RAIN 02-SNOW 03-COMP/04-OTHER	GAUGE DEPTH(MM)	GAUGE TYPE 01-STD. 02-NIPHER	SAMPLE NUMBER	PROJECT CODE 02-APIOS 03-SPECIAL	SUBPROJECT CODE 01-MOE 03-AES	SAMPLER EFFICI- ENCY (%)	COMMENTS FIELD OFFICE
JUL 19,88	JUL 17,88	955 900	1511 5570	1	0.2	1	37694	2	1	39	A Y2
JUL 22,88	JUL 20,88	915 930	1300 1600	1	12.2	1	37922	2	1	100	C CY2
JUL 23,88	JUL 22,88	930 915	800 945	1	1.4	1	37924	2	1	89	
JUL 24,88	JUL 23,88	915 910	1400 1530	1	2.2	1	37925	2	1	97	
JUL 25,88	JUL 24,88	910 1000	1600 1745	1	3.2	1	37926	2	1	98	
JUL 26,88	JUL 25,88	1000 1030	1130 1215	1	0.6	1	37927	2	1	13	C
JUL 29,88	JUL 26,88	1030 815	2121 2318	1	0.2	1	37958	2	1	****	E NY3
JUL 30,88	JUL 29,88	815 935	544 709	1	0.6	1	37959	2	1	51	C
AUG 1,88	JUL 30,88	935 1015	****	1	0.4	1	37960	2	1	19	NY2
AUG 2,88	AUG 1,88	1015 1000	2200 200	1	1.4	1	37961	2	1	25	C N
AUG 5,88	AUG 2,88	1000 930	100 600	1	8.0	1	37988	2	1	U 102	ACG Y3
AUG 6,88	AUG 5,88	930 918	1643 1808	1	3.0	1	37989	2	1	95	ACD
AUG 7,88	AUG 6,88	918 933	1932 2130	1	0.6	1	37990	2	1	38	C N
AUG 8,88	AUG 7,88	933 1000	2000 2100	1	0.2	1	37991	2	1	15	XN
AUG 9,88	AUG 8,88	1000 950	**** 230	1	12.4	1	37992	2	1	101	CD
AUG 10,88	AUG 9,88	950 1015	1500 1750	1	1.4	1	83035	2	1	71	CD
AUG 12,88	AUG 10,88	1015 931	2024 2337	1	0.2	1	83036	2	1	****	KE Y2
AUG 13,88	AUG 12,88	931 955	2026 30	1	5.0	1	83037	2	1	98	CD C
AUG 14,88	AUG 13,88	955 1115	1758 406	1	22.0	1	83039	2	1	114	ACD N
AUG 15,88	AUG 14,88	1115 1045	2206 2219	1	2.0	1	83040	2	1	77	CD J
AUG 16,88	AUG 15,88	1045 1030	2042 2044	4	0.2	1	83041	2	1	****	KE
AUG 17,88	AUG 16,88	1030 1015	1907 730	1	5.4	1	83042	2	1	99	CD M
AUG 18,88	AUG 17,88	1015 857	1156 1209	1	1.2	1	83043	2	1	76	CD J
AUG 21,88	AUG 19,88	1030 1000	1400 1521	1	3.0	1	83045	2	1	U 85	FCD Y2
AUG 24,88	AUG 23,88	904 930	1500 ****	1	7.0	1	83153	2	1	90	CD
AUG 25,88	AUG 24,88	930 947	900 947	1	2.0	1	83154	2	1	76	CD
AUG 26,88	AUG 25,88	947 1000	947 1230	1	5.8	1	83155	2	1	90	ACD M
AUG 27,88	AUG 26,88	1000 1015	1400 1405	1	0.2	1	83156	2	1	****	K
AUG 28,88	AUG 27,88	1015 915	1915 2130	1	4.4	1	83157	2	1	96	CD
AUG 30,88	AUG 28,88	915 1000	1500 1900	1	0.3	1	83158	2	1	62	CD Y2
AUG 31,88	AUG 30,88	1000 945	1328 1505	1	2.0	1	83159	2	1	73	CD HM
SEP 2,88	AUG 31,88	945 1004	1509 2102	1	0.2	2	83160	2	1	U 7	K Y2
SEP 4,88	SEP 2,88	1004 1000	1932 18	1	2.4	1	83161	2	1	99	CD Y2
SEP 5,88	SEP 5,88	1000 1007	2100 2233	1	6.2	1	83162	2	1	100	CD Z
SEP 6,88	SEP 5,88	1007 1007	1017 1246	1	0.2	1	83163	2	1	124	N
SEP 7,88	SEP 6,88	1007 915	1253 1445	1	2.4	1	83198	2	1	112	ACD JC
SEP 9,88	SEP 7,88	951 1025	2253 328	1	1.0	1	83199	2	1	76	CD Y2
SEP 13,88	SEP 11,88	1010 840	1504 2317	1	37.0	1	83201	2	1	105	NJY2
SEP 14,88	SEP 13,88	840 928	1225 350	1	0.4	1	83231	2	1	77	BCD N
SEP 15,88	SEP 14,88	928 1040	1457 1515	1	0.2	1	83232	2	1	15	N

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REMOVAL DATE	EXPOSURE DATE	CALCIUM	CHLORIDE	MAGNESIM	POTASSIM	SODIUM	AMMONIUM	FREE H+
		MG/L	MG/L	MG/L	MG/L	MG/L	AS N MG/L	LAB MG/L
JUL 19,88	JUL 17,88	!IS *****	0.08	!IS *****	!IS *****	!IS *****	0.040	0.0054
JUL 22,88	JUL 20,88	<T 0.06	<T 0.05	<T 0.015	<T 0.010	<T 0.005	0.088	0.0126
JUL 23,88	JUL 22,88	0.12	0.11	0.040	0.035	<T 0.025	<T 0.012	0.0251
JUL 24,88	JUL 23,88	<T 0.06	0.10	<T 0.015	0.030	0.030	0.028	0.0363
JUL 25,88	JUL 24,88	<T 0.06	0.11	<T 0.025	0.035	0.030	0.080	0.0363
JUL 26,88	JUL 25,88	!IS *****	0.12	!IS *****	!IS *****	!IS *****	0.028	D 0.0010
JUL 29,88	JUL 26,88	*****	*****	*****	*****	*****	*****	*****
JUL 30,88	JUL 29,88	!IS *****	0.12	!IS *****	!IS *****	!IS *****	0.030	0.0257
AUG 1,88	JUL 30,88	*****	*****	*****	*****	*****	*****	*****
AUG 2,88	AUG 1,88	!IS *****	0.30	!IS *****	!IS *****	!IS *****	0.612	0.0234
AUG 5,88	AUG 2,88	0.46	0.19	0.070	0.030	0.050	0.414	0.0851
AUG 6,88	AUG 5,88	0.46	D 0.24	0.060	0.040	0.045	D 0.910	D 0.2754
AUG 7,88	AUG 6,88	!IS *****	<T 0.06	!IS *****	!IS *****	!IS *****	0.032	D 0.0019
AUG 8,88	AUG 7,88	*****	*****	*****	*****	*****	*****	*****
AUG 9,88	AUG 8,88	0.12	0.07	0.030	0.025	0.025	0.520	0.0407
AUG 10,88	AUG 9,88	!IS *****	0.30	!IS *****	!IS *****	!IS *****	D 0.686	D 0.2089
AUG 12,88	AUG 10,88	*****	*****	*****	*****	*****	*****	*****
AUG 13,88	AUG 12,88	0.20	D 0.24	0.035	0.075	0.115	0.576	0.0240
AUG 14,88	AUG 13,88	0.32	0.16	0.050	0.035	0.070	0.556	0.1047
AUG 15,88	AUG 14,88	0.18	0.10	0.035	0.105	0.065	D 0.520	0.0071
AUG 16,88	AUG 15,88	*****	*****	*****	*****	*****	*****	*****
AUG 17,88	AUG 16,88	<T 0.04	<W 0.01	<T 0.010	0.065	0.030	0.106	0.0141
AUG 18,88	AUG 17,88	!IS *****	0.12	!IS *****	!IS *****	!IS *****	<W 0.006	D 0.0219
AUG 21,88	AUG 19,88	<T 0.06	<T 0.05	<T 0.010	0.025	<T 0.025	<W 0.006	0.0166
AUG 24,88	AUG 23,88	0.14	0.12	<T 0.020	0.025	<T 0.025	0.316	0.1349
AUG 25,88	AUG 24,88	0.20	0.08	0.040	D 0.180	D 0.260	0.110	0.0282
AUG 26,88	AUG 25,88	<W 0.02	<W 0.01	<W 0.005	<T 0.020	<T 0.015	0.030	0.0039
AUG 27,88	AUG 26,88	*****	*****	*****	*****	*****	*****	*****
AUG 28,88	AUG 27,88	0.24	0.10	0.075	0.035	0.025	0.336	0.0347
AUG 30,88	AUG 28,88	<T 0.04	0.09	<T 0.010	0.050	0.065	!IS *****	0.0047
AUG 31,88	AUG 30,88	<T 0.02	0.08	<T 0.010	0.030	0.030	0.060	0.0058
SEP 2,88	AUG 31,88	*****	*****	*****	*****	*****	*****	*****
SEP 4,88	SEP 2,88	0.32	0.18	0.050	0.065	0.045	0.600	0.1122
SEP 5,88	SEP 5,88	<T 0.02	0.08	<T 0.015	0.030	<T 0.025	0.676	0.1096
SEP 6,88	SEP 5,88	<W 0.02	0.11	<T 0.005	0.050	0.075	!IS *****	0.0025
SEP 7,88	SEP 6,88	<T 0.04	0.09	<T 0.020	UG 0.400	0.030	0.040	0.0043
SEP 9,88	SEP 7,88	U 11.60	UG 1.51	U 1.600	U 1.820	UG 0.735	UG 4.540	UG 0.0001
SEP 13,88	SEP 11,88	0.10	0.08	<T 0.020	<T 0.020	0.035	0.236	0.0407
SEP 14,88	SEP 13,88	<T 0.10	<T 0.03	0.040	0.095	0.050	<T 0.020	0.0095
SEP 15,88	SEP 14,88	*****	*****	*****	*****	*****	*****	*****

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : HIGH FALLS/DAILY/AEROCHEM

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REMOVAL DATE	EXPOSURE DATE	SAMPLING START/END HR. HR.	PRECIP START/END HR. HR.	SAMPLE TYPE 01-RAIN 02-SNOW 03-COMP/04-OTHER	GAUGE DEPTH(MM)	GAUGE TYPE 01-STD. 02-NIPHER	SAMPLE NUMBER	PROJECT CODE 02-APIOS 03-SPECIAL	SUBPROJECT CODE 01-MOE 03-AES	SAMPLER EFFICI- ENCY (%)	COMMENTS FIELD OFFICE
SEP 17,88	SEP 16,88	1455 1000	2203 2341	1	0.3	1	83234	2	1	280	CD N
SEP 18,88	SEP 17,88	1000 1112	1030 1300	1	13.4	1	83235	2	1	95	CD N
SEP 21,88	SEP 20,88	906 905	1026 1555	1	10.2	1	83238	2	1	92	CD M
SEP 23,88	SEP 22,88	1055 925	2300 130	1	14.8	1	83240	2	1	U 30	FCD
SEP 27,88	SEP 25,88	900 1115	1800 2131	1	9.4	1	83243	2	1	100	CD Y2
SEP 30,88	SEP 29,88	945 1025	2043 2101	1	0.2	1	83287	2	1	15	E N
OCT 1,88	SEP 30,88	1025 945	1821 1926	1	2.2	1	83288	2	1	85	HM
OCT 2,88	OCT 1,88	945 1055	951 2318	1	30.0	1	83289	2	1	81	N
OCT 3,88	OCT 2,88	1055 1120	1106 1218	1	1.8	1	83291	2	1	70	N
OCT 5,88	OCT 4,88	830 1030	1000 1430	3	32.0	1	83321	2	1	88	CD NC
OCT 8,88	OCT 7,88	945 1000	****	4	0.4	1	83324	2	1	****	EK
OCT 10,88	OCT 8,88	1000 1030	****	1	8.2	1	83325	2	1	105	CD HCMY2
OCT 11,88	OCT 10,88	1030 940	2100 2102	1	0.2	1	83326	2	1	23	CD N
OCT 17,88	OCT 16,88	1025 1030	1700 2215	1	12.8	1	83360	2	1	100	BCD C
OCT 18,88	OCT 17,88	1030 1100	2030 630	1	36.0	1	83361	2	1	88	CD NHCM
OCT 21,88	OCT 20,88	845 950	545 950	1	1.0	1	83390	2	1	110	CD
OCT 22,88	OCT 21,88	950 1030	950 215	1	15.8	1	83391	2	1	105	CD N
OCT 24,88	OCT 22,88	1030 950	1930 2145	1	2.4	1	83393	2	1	120	CD Y2
OCT 25,88	OCT 24,88	950 945	1000 945	1	4.0	1	83394	2	1	105	CD
OCT 26,88	OCT 25,88	945 900	945 1600	1	0.8	1	83421	2	1	64	CD
OCT 28,88	OCT 26,88	900 1200	1500 2000	1	30.6	1	83422	2	1	80	CDB NY2
OCT 29,88	OCT 28,88	1200 1145	400 800	1	****	1	83424	2	1	****	CDB HM
NOV 1,88	OCT 31,88	1115 1015	2000 1015	3	4.4	1	83426	2	1	114	CD HM
NOV 2,88	NOV 1,88	1015 1000	1015 2000	1	2.2	2	83486	2	1	123	CD J
NOV 3,88	NOV 2,88	1000 1015	****	1	****	2	83487	2	1	****	CD
NOV 4,88	NOV 3,88	1015 955	130 955	1	0.6	2	83488	2	1	119	CD
NOV 5,88	NOV 4,88	955 1115	955 1115	1	19.4	2	83489	2	1	99	CD N
NOV 6,88	NOV 5,88	1115 1120	1115 1120	1	35.2	2	83492	2	1	62	CD N
NOV 7,88	NOV 6,88	1120 1000	1120 1500	1	1.4	1	83493	2	1	****	G
NOV 8,88	NOV 7,88	1000 1040	1600 1800	1	0.4	2	83494	2	1	117	CD N
NOV 9,88	NOV 8,88	1040 1000	1040 1330	1	0.6	2	83495	2	1	174	CD NJ
NOV 10,88	NOV 9,88	1000 1120	1120 1120	2	8.2	2	83496	2	1	233	
NOV 12,88	NOV 11,88	1120 1020	****	4	****	2	83498	2	1	****	Q
NOV 13,88	NOV 12,88	1020 930	1930 930	1	13.4	2	83499	2	1	86	CD
NOV 14,88	NOV 13,88	930 1010	930 1600	4	0.6	2	83500	2	1	****	E N
NOV 16,88	NOV 15,88	1030 1030	1200 2200	1	5.4	2	83525	2	1	95	CD
NOV 17,88	NOV 16,88	1030 1025	1030 1125	2	7.0	2	83526	2	1	80	CDB
NOV 18,88	NOV 17,88	1025 1035	1025 1200	2	3.6	2	83527	2	1	79	CD M
NOV 19,88	NOV 18,88	1035 300	1130 1415	2	1.0	2	83528	2	1	U 4	CDP
NOV 20,88	NOV 19,88	300 1115	1600 600	3	1.8	2	83529	2	1	50	CD N

ONTARIO MINISTRY OF THE ENVIRONMENT
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APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : HIGH FALLS/DAILY/AEROCHEM

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REMOVAL DATE	EXPOSURE DATE	VOLUME ML	CONDUCT. UMHO/CM	PH FIELD	PH LAB	TOTAL H+ TO PH8.3 MG/L	TOTAL H+ GRAN MG/L	SULPHATE MG/L	NITRATE AS N MG/L	
SEP 17,88	SEP 16,88	54.0	66.0	3.76	D	3.85	*****	0.1860	5.65	1.88
SEP 18,88	SEP 17,88	822.0	40.0	4.03		4.04	*****	0.1220	3.60	0.93
SEP 21,88	SEP 20,88	606.0	3.5	4.98		5.14	*****	0.0270	0.35	0.07
SEP 23,88	SEP 22,88	288.0	21.0	4.27		4.31	*****	0.0759	2.15	0.43
SEP 27,88	SEP 25,88	608.0	31.0	4.40		4.47	*****	0.0673	5.10	1.25
SEP 30,88	SEP 29,88	2.0	*****	*****	*****	*****	*****	*****	*****	*****
OCT 1,88	SEP 30,88	121.0	89.0	3.66		3.67	*****	UG 0.2530	9.30	1.28
OCT 2,88	OCT 1,88	1573.0	15.0	4.41		4.49	*****	0.0569	1.75	0.26
OCT 3,88	OCT 2,88	81.0	!IS *****	4.83	!IS *****	*****	!IS *****	!IS *****	!IS *****	*****
OCT 5,88	OCT 4,88	1816.0	6.0	4.55		4.67	*****	0.0477	0.75	0.08
OCT 8,88	OCT 7,88	*****	*****	*****	*****	*****	*****	*****	*****	*****
OCT 10,88	OCT 8,88	552.0	6.0	4.60		4.76	*****	0.0447	0.95	<T 0.01
OCT 11,88	OCT 10,88	3.0	*****	*****	*****	*****	*****	*****	*****	*****
OCT 17,88	OCT 16,88	825.0	12.5	4.29		4.45	*****	0.0800	1.75	0.34
OCT 18,88	OCT 17,88	2043.0	5.0	4.60		4.67	*****	0.0641	0.65	0.14
OCT 21,88	OCT 20,88	71.0	61.5	3.75		3.84	*****	0.1830	2.35	2.00
OCT 22,88	OCT 21,88	1064.0	31.5	3.97		4.14	*****	0.1020	1.70	0.83
OCT 24,88	OCT 22,88	185.0	28.0	4.07		4.20	*****	0.0916	1.90	0.70
OCT 25,88	OCT 24,88	270.0	14.0	4.33		4.52	*****	0.0548	1.00	0.38
OCT 26,88	OCT 25,88	33.0	5.0	*****		4.97	*****	0.0320	0.60	0.09
OCT 28,88	OCT 26,88	1572.0	22.0	4.20		4.37	*****	0.0706	1.65	0.75
OCT 29,88	OCT 28,88	11.0	2.0	*****	UG	7.01	*****	0.0162	<T 0.25	<W 0.01
NOV 1,88	OCT 31,88	324.0	71.5	3.75		3.83	*****	0.1870	4.15	0.40
NOV 2,88	NOV 1,88	174.0	71.5	UG 5.81		3.82	*****	0.1940	4.70	2.60
NOV 3,88	NOV 2,88	75.0	15.0	4.42		4.51	*****	0.0586	1.60	0.31
NOV 4,88	NOV 3,88	46.0	> 100.0	*****		3.61	*****	UG 0.3120	9.05	!IS *****
NOV 5,88	NOV 4,88	1239.0	44.0	4.01		4.03	*****	0.1240	4.15	0.77
NOV 6,88	NOV 5,88	1407.0	23.5	4.27		4.34	*****	0.0733	2.20	0.43
NOV 7,88	NOV 6,88	*****	*****	*****	*****	*****	*****	*****	*****	*****
NOV 8,88	NOV 7,88	30.0	28.0	*****		4.24	*****	0.0863	2.30	0.66
NOV 9,88	NOV 8,88	67.0	8.5	4.02		4.86	*****	0.0383	0.95	0.20
NOV 10,88	NOV 9,88	1228.0	7.0	4.65		4.77	*****	0.0383	0.60	0.24
NOV 12,88	NOV 11,88	51.0	9.0	*****		4.66	*****	0.0455	0.65	0.26
NOV 13,88	NOV 12,88	745.0	21.0	4.20		4.37	*****	0.0715	1.70	0.55
NOV 14,88	NOV 13,88	*****	*****	*****	*****	*****	*****	*****	*****	*****
NOV 16,88	NOV 15,88	329.0	39.5	*****		4.06	*****	0.1140	4.40	0.62
NOV 17,88	NOV 16,88	359.0	14.0	*****		4.77	*****	0.0408	2.35	0.29
NOV 18,88	NOV 17,88	184.0	4.0	*****		5.09	*****	0.0255	0.50	0.11
NOV 19,88	NOV 18,88	3.0	*****	*****	*****	*****	*****	*****	*****	*****
NOV 20,88	NOV 19,88	58.0	67.5	*****		3.83	*****	0.1890	4.35	1.84

ONTARIO MINISTRY OF THE ENVIRONMENT
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REMOVAL DATE	EXPOSURE DATE	CALCIUM MG/L	CHLORIDE MG/L	MAGNESIM MG/L	POTASSIM MG/L	SODIUM MG/L	AMMONIUM AS N MG/L	FREE H+ LAB MG/L
SEP 17,88	SEP 16,88	0.40	0.25	0.075	0.100	0.110	D 1.150	D 0.1413
SEP 18,88	SEP 17,88	<T 0.10	0.06	<T 0.025	<T 0.020	<T 0.020	D 0.626	0.0912
SEP 21,88	SEP 20,88	<W 0.02	<W 0.01	<W 0.005	<T 0.015	<T 0.005	0.110	0.0072
SEP 23,88	SEP 22,88	<T 0.06	<T 0.03	<T 0.005	<T 0.020	<T 0.025	0.326	0.0490
SEP 27,88	SEP 25,88	1.26	0.19	0.265	0.085	0.110	0.990	0.0339
SEP 30,88	SEP 29,88	*****	*****	*****	*****	*****	*****	*****
OCT 1,88	SEP 30,88	0.40	0.36	0.120	0.075	0.105	1.590	0.2138
OCT 2,88	OCT 1,88	<T 0.02	0.06	<T 0.020	<T 0.020	0.030	0.296	0.0324
OCT 3,88	OCT 2,88	!IS *****	!IS *****	!IS *****	!IS *****	!IS *****	!IS *****	!IS *****
OCT 5,88	OCT 4,88	<W 0.02	<W 0.01	<W 0.005	<T 0.010	<T 0.020	<T 0.006	0.0214
OCT 8,88	OCT 7,88	*****	*****	*****	*****	*****	*****	*****
OCT 10,88	OCT 8,88	<T 0.02	<W 0.01	<T 0.010	<T 0.015	<W 0.005	0.230	0.0174
OCT 11,88	OCT 10,88	*****	*****	*****	*****	*****	*****	*****
OCT 17,88	OCT 16,88	0.20	<W 0.01	0.060	0.035	<T 0.020	0.256	0.0355
OCT 18,88	OCT 17,88	<T 0.04	<W 0.01	<T 0.015	<T 0.010	<W 0.005	0.120	0.0214
OCT 21,88	OCT 20,88	0.40	0.39	0.060	0.040	0.060	0.380	0.1445
OCT 22,88	OCT 21,88	<W 0.02	0.07	<W 0.005	<T 0.015	<T 0.010	0.280	0.0724
OCT 24,88	OCT 22,88	<T 0.10	0.14	<T 0.020	0.075	0.105	0.226	0.0631
OCT 25,88	OCT 24,88	<T 0.04	<T 0.01	<T 0.010	0.025	0.035	0.146	0.0302
OCT 26,88	OCT 25,88	0.10	0.07	<T 0.015	0.040	0.090	0.036	0.0107
OCT 28,88	OCT 26,88	0.26	0.06	0.030	0.035	0.030	0.410	0.0427
OCT 29,88	OCT 28,88	<W 0.02	<W 0.01	<T 0.020	UG 0.755	<T 0.020	0.026	UG 0.0001
NOV 1,88	OCT 31,88	0.40	0.56	0.085	0.160	0.240	U 1.220	0.1479
NOV 2,88	NOV 1,88	0.46	0.56	0.075	0.080	0.155	0.836	0.1514
NOV 3,88	NOV 2,88	<T 0.06	0.13	<T 0.015	0.040	0.045	0.160	0.0309
NOV 4,88	NOV 3,88	0.62	0.90	0.080	UG 0.240	0.360	1.910	0.2455
NOV 5,88	NOV 4,88	0.12	0.18	<T 0.015	<T 0.020	0.050	0.460	0.0933
NOV 6,88	NOV 5,88	<T 0.02	0.23	<T 0.015	<T 0.015	0.125	0.270	0.0457
NOV 7,88	NOV 6,88	*****	*****	*****	*****	*****	*****	*****
NOV 8,88	NOV 7,88	!IS *****	0.34	!IS *****	!IS *****	!IS *****	0.046	0.0575
NOV 9,88	NOV 8,88	<T 0.08	0.13	<T 0.010	0.045	0.130	0.070	0.0138
NOV 10,88	NOV 9,88	<T 0.04	0.08	<W 0.005	<T 0.015	0.030	0.076	0.0170
NOV 12,88	NOV 11,88	<T 0.06	0.10	<T 0.010	<T 0.025	0.035	<W 0.006	0.0219
NOV 13,88	NOV 12,88	<T 0.06	0.13	<T 0.005	<T 0.020	0.030	0.296	0.0427
NOV 14,88	NOV 13,88	*****	*****	*****	*****	*****	*****	*****
NOV 16,88	NOV 15,88	0.30	0.44	0.040	0.070	D 0.205	0.256	0.0871
NOV 17,88	NOV 16,88	0.44	0.11	0.050	0.055	0.045	0.250	0.0170
NOV 18,88	NOV 17,88	<T 0.06	0.13	<T 0.010	<T 0.010	<T 0.025	0.040	0.0081
NOV 19,88	NOV 18,88	*****	*****	*****	*****	*****	*****	*****
NOV 20,88	NOV 19,88	0.18	0.63	0.030	UG 0.220	0.355	0.446	0.1479

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : HIGH FALLS/DAILY/AEROCHEM

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REMOVAL DATE	EXPOSURE DATE	SAMPLING START/END HR. HR.	PRECIP START/END HR. HR.	SAMPLE TYPE 01-RAIN 02-SNOW 03-COMP/04-OTHER	GAUGE DEPTH(MM)	GAUGE TYPE 01-STD. 02-NIPHER	SAMPLE NUMBER	PROJECT CODE 02-APIOS 03-SPECIAL	SUBPROJECT CODE 01-MOE 03-AES	SAMPLER EFFICI- ENCY (%)	COMMENTS FIELD OFFICE
NOV 21,88	NOV 20,88	1115 1030	1115 1500	1	1.0	2	83530	2	1	6	CDE N
NOV 22,88	NOV 21,88	1030 1100	30 1100	3	1.2	2	83531	2	1	****	E N
NOV 23,88	NOV 22,88	1100 755	1100 1800	2	0.4	2	83565	2	1	****	EK
NOV 24,88	NOV 23,88	755 915	1630 800	2	3.0	2	83566	2	1	79	CD
NOV 27,88	NOV 26,88	1005 1025	1130 1025	1	38.2	2	83569	2	1	60	CD N
NOV 28,88	NOV 27,88	1025 1045	1025 1045	3	7.8	2	83571	2	1	87	CD
NOV 29,88	NOV 28,88	1045 950	1045 1530	2	0.6	2	83572	2	1	U 38	GCD
NOV 30,88	NOV 29,88	950 841	1825 845	2	6.8	2	83573	2	1	106	CD
DEC 1,88	NOV 30,88	841 855	919 1224	2	1.4	2	83574	2	1	****	EK
DEC 4,88	DEC 3,88	716 858	1133 1443	3	****	2	83577	2	1	****	CDE
DEC 8,88	DEC 7,88	815 817	125 417	2	0.4	2	83615	2	1	85	CD
DEC 11,88	DEC 9,88	826 848	2129 30	2	****	2	83617	2	1	****	E Z
DEC 12,88	DEC 11,88	848 825	710 825	2	****	2	83618	2	1	****	J
DEC 13,88	DEC 12,88	848 830	844 1618	2	2.8	2	83619	2	1	86	CDQ
DEC 14,88	DEC 13,88	830 830	836 1512	2	0.2	2	83620	2	1	116	CD
DEC 15,88	DEC 14,88	830 842	849 2305	2	17.4	2	83621	2	1	75	CD N
DEC 17,88	DEC 16,88	845 930	845 930	2	0.1	2	83667	2	1	U 233	FJCD
DEC 18,88	DEC 17,88	930 830	930 830	2	0.6	2	83668	2	1	U 80	JCD
DEC 19,88	DEC 18,88	830 740	830 940	2	0.8	2	83669	2	1	U 113	FJCD
DEC 20,88	DEC 19,88	740 845	500 845	3	4.0	2	83670	2	1	U 121	FJCD
DEC 21,88	DEC 20,88	845 835	845 1830	4	11.7	2	83671	2	1	103	CD
DEC 23,88	DEC 21,88	835 905	223 905	2	10.6	2	83672	2	1	98	CD Z
DEC 24,88	DEC 23,88	905 1030	405 2100	3	2.8	2	83673	2	1	126	CD HM
DEC 25,88	DEC 24,88	1043 953	28 613	2	****	2	83674	2	1	****	EC
DEC 26,88	DEC 25,88	953 957	953 2230	2	0.5	2	83675	2	1	87	CD
DEC 27,88	DEC 26,88	957 940	1430 940	2	7.6	2	83676	2	1	94	CD
DEC 28,88	DEC 27,88	940 830	940 1330	2	7.4	2	83677	2	1	89	CD M
DEC 29,88	DEC 28,88	830 815	830 1150	2	****	2	83678	2	1	****	E
DEC 30,88	DEC 29,88	815 840	1900 500	2	0.1	2	83752	2	1	327	CD
DEC 31,88	DEC 30,88	840 1005	858 2100	2	3.2	2	83753	2	1	98	CD

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : HIGH FALLS/DAILY/AEROCHEM

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REMOVAL DATE	EXPOSURE DATE	VOLUME ML	CONDUCT. UMHO/CM	PH FIELD	PH LAB	TOTAL H+ TO PH8.3 MG/L	TOTAL H+ GRAN MG/L	SULPHATE MG/L	NITRATE AS N MG/L
NOV 21,88	NOV 20,88	4.0	*****	*****	*****	*****	*****	*****	*****
NOV 22,88	NOV 21,88	*****	*****	*****	*****	*****	*****	*****	*****
NOV 23,88	NOV 22,88	*****	*****	*****	*****	*****	*****	*****	*****
NOV 24,88	NOV 23,88	153.0	> 100.0	LG 3.63	3.72	*****	UG 0.2660	4.20	UG 2.90
NOV 27,88	NOV 26,88	1475.0	39.0	4.09	4.14	*****	0.1000	2.85	0.72
NOV 28,88	NOV 27,88	435.0	16.0	4.44	4.57	*****	0.0489	1.70	0.23
NOV 29,88	NOV 28,88	15.0	35.0	*****	5.14	*****	0.0237	!IS *****	!IS *****
NOV 30,88	NOV 29,88	463.0	!IS *****	4.13	4.18	*****	0.0865	D 1.15	1.07
DEC 1,88	NOV 30,88	*****	*****	*****	*****	*****	*****	*****	*****
DEC 4,88	DEC 3,88	5.0	*****	*****	*****	*****	*****	*****	*****
DEC 8,88	DEC 7,88	22.0	!IS *****	*****	UG 5.76	*****	0.0186	!IS *****	!IS *****
DEC 11,88	DEC 9,88	4.0	*****	*****	*****	*****	*****	*****	*****
DEC 12,88	DEC 11,88	1.0	*****	*****	*****	*****	*****	*****	*****
DEC 13,88	DEC 12,88	155.0	31.1	4.10	4.25	*****	0.0806	1.00	1.04
DEC 14,88	DEC 13,88	15.0	!IS *****	*****	4.48	*****	0.0491	!IS *****	!IS *****
DEC 15,88	DEC 14,88	843.0	27.4	4.18	D 4.20	*****	0.0757	1.15	0.76
DEC 17,88	DEC 16,88	15.0	!IS *****	*****	4.58	*****	0.0419	!IS *****	!IS *****
DEC 18,88	DEC 17,88	31.0	!IS *****	*****	4.07	*****	0.0952	!IS *****	!IS *****
DEC 19,88	DEC 18,88	58.0	!IS *****	4.11	4.21	*****	0.0744	!IS *****	!IS *****
DEC 20,88	DEC 19,88	312.0	31.5	4.20	4.37	*****	0.0559	2.25	0.80
DEC 21,88	DEC 20,88	773.0	23.0	4.40	D 4.46	*****	0.0453	2.00	0.49
DEC 23,88	DEC 21,88	669.0	15.5	4.41	4.57	*****	0.0456	0.80	0.34
DEC 24,88	DEC 23,88	227.0	31.5	4.33	4.28	*****	0.0678	2.45	0.91
DEC 25,88	DEC 24,88	3.0	*****	*****	*****	*****	*****	*****	*****
DEC 26,88	DEC 25,88	28.0	!IS *****	*****	4.89	*****	0.0279	!IS *****	!IS *****
DEC 27,88	DEC 26,88	460.0	6.5	4.67	4.85	*****	0.0273	0.25	0.15
DEC 28,88	DEC 27,88	425.0	12.0	4.51	4.59	*****	0.0378	0.80	0.23
DEC 29,88	DEC 28,88	2.0	*****	*****	*****	*****	*****	*****	*****
DEC 30,88	DEC 29,88	21.0	7.5	*****	4.80	*****	0.0338	0.45	0.37
DEC 31,88	DEC 30,88	202.0	40.0	3.88	4.04	*****	0.1360	D 2.30	1.49

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : HIGH FALLS/DAILY/AEROCHEM

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REMOVAL DATE	EXPOSURE DATE	CALCIUM MG/L	CHLORIDE MG/L	MAGNESIUM MG/L	POTASSIUM MG/L	SODIUM MG/L	AMMONIUM AS N MG/L	FREE H+ LAB MG/L
NOV 21,88	NOV 20,88	*****	*****	*****	*****	*****	*****	*****
NOV 22,88	NOV 21,88	*****	*****	*****	*****	*****	*****	*****
NOV 23,88	NOV 22,88	*****	*****	*****	*****	*****	*****	*****
NOV 24,88	NOV 23,88	0.44	0.43	0.035	0.040	0.050	0.830	0.1905
NOV 27,88	NOV 26,88	<T 0.10	0.23	<T 0.015	0.035	0.090	0.436	0.0724
NOV 28,88	NOV 27,88	<T 0.04	0.07	<T 0.005	0.025	0.045	0.246	0.0269
NOV 29,88	NOV 28,88	<T 0.02	!IS *****	<W 0.005	<T 0.020	0.030	<T 0.016	0.0072
NOV 30,88	NOV 29,88	0.12	0.23	<T 0.015	<T 0.020	0.055	D 0.366	0.0661
DEC 1,88	NOV 30,88	*****	*****	*****	*****	*****	*****	*****
DEC 4,88	DEC 3,88	*****	*****	*****	*****	*****	*****	*****
DEC 8,88	DEC 7,88	<T 0.04	!IS *****	<T 0.010	0.030	0.130	<T 0.016	UG 0.0017
DEC 11,88	DEC 9,88	*****	*****	*****	*****	*****	*****	*****
DEC 12,88	DEC 11,88	*****	*****	*****	*****	*****	*****	*****
DEC 13,88	DEC 12,88	0.40	0.40	0.060	0.040	0.095	0.176	0.0562
DEC 14,88	DEC 13,88	0.10	!IS *****	<T 0.015	0.025	0.040	0.070	0.0331
DEC 15,88	DEC 14,88	<T 0.06	0.23	<T 0.010	<T 0.025	0.045	D 0.396	D 0.0631
DEC 17,88	DEC 16,88	0.16	!IS *****	<T 0.020	0.035	0.095	<T 0.016	0.0263
DEC 18,88	DEC 17,88	<T 0.08	!IS *****	<T 0.015	0.030	0.065	<T 0.016	0.0851
DEC 19,88	DEC 18,88	0.12	!IS *****	<T 0.020	0.035	0.180	0.150	0.0617
DEC 20,88	DEC 19,88	0.54	<W 0.01	0.055	0.050	0.105	0.396	0.0427
DEC 21,88	DEC 20,88	0.32	0.14	0.030	0.055	0.075	D 0.386	D 0.0347
DEC 23,88	DEC 21,88	<T 0.06	<W 0.07	<T 0.005	<T 0.015	<T 0.020	0.126	0.0269
DEC 24,88	DEC 23,88	0.36	0.17	0.030	0.050	0.080	0.930	0.0525
DEC 25,88	DEC 24,88	*****	*****	*****	*****	*****	*****	*****
DEC 26,88	DEC 25,88	<T 0.06	!IS *****	<T 0.015	0.060	0.080	<T 0.020	0.0129
DEC 27,88	DEC 26,88	<W 0.02	<W 0.01	<W 0.005	<W 0.005	<T 0.020	<T 0.020	0.0141
DEC 28,88	DEC 27,88	<T 0.08	<W 0.01	<T 0.005	<T 0.015	0.030	0.110	0.0257
DEC 29,88	DEC 28,88	*****	*****	*****	*****	*****	*****	*****
DEC 30,88	DEC 29,88	0.20	0.43	<T 0.015	0.110	0.240	!IS *****	0.0158
DEC 31,88	DEC 30,88	0.22	0.45	<T 0.015	0.050	0.135	0.394	0.0912

PART V

NORTHWESTERN REGION

DAILY PRECIPITATION CHEMISTRY LISTINGS

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : DAWSON/DAILY/AEROCHEM./6131

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REMOVAL DATE	EXPOSURE DATE	SAMPLING START/END HR. HR.	PRECIP START/END HR. HR.	SAMPLE TYPE 01-RAIN 02-SNOW 03-COMP/04-OTHER	GAUGE DEPTH(MM)	GAUGE TYPE 01-STD. 02-NIPHER	SAMPLE NUMBER	PROJECT CODE 02-APIOS 03-SPECIAL	SUBPROJECT CODE 01-MOE 03-AES	SAMPLER EFFICI- ENCY (%)	COMMENTS FIELD OFFICE
JAN 1,88	DEC 31,87	1600 1600	**** ****	2	2.8	2	85105	2	1	43	N
JAN 12,88	JAN 11,88	1600 1600	**** ****	2	7.8	2	85108	2	1	22	N
JAN 21,88	JAN 20,88	1600 1600	**** ****	2	0.1	2	85110	2	1	****	EK
JAN 22,88	JAN 21,88	1600 1600	**** ****	2	9.0	2	85112	2	1	32	N
JAN 23,88	JAN 22,88	1600 1600	**** ****	2	0.8	2	85114	2	1	25	N
JAN 29,88	JAN 28,88	1600 1600	**** ****	2	5.4	2	85116	2	1	12	N
JAN 31,88	JAN 30,88	1600 1600	**** ****	2	8.6	2	85118	2	1	40	N
FEB 7,88	FEB 6,88	1600 1600	**** ****	2	3.0	2	85120	2	1	56	
FEB 14,88	FEB 13,88	1600 1600	**** ****	2	0.1	2	85122	2	1	****	EK
FEB 16,88	FEB 15,88	1600 1600	**** ****	2	2.4	2	85124	2	1	40	N
FEB 20,88	FEB 19,88	1600 1600	**** ****	2	0.4	2	85126	2	1	****	EK
FEB 21,88	FEB 20,88	1600 1600	**** ****	2	0.2	1	85128	2	1	****	EK
FEB 22,88	FEB 21,88	1600 1600	**** ****	2	3.2	2	85130	2	1	65	
FEB 28,88	FEB 27,88	1600 1600	**** ****	2	0.2	2	85132	2	1	265	N
MAR 1,88	FEB 29,88	1600 1600	**** ****	2	3.4	2	85134	2	1	22	N
MAR 6,88	MAR 5,88	1600 1600	**** ****	2	0.4	2	85136	2	1	245	NHM
MAR 8,88	MAR 7,88	1600 1600	**** ****	2	9.6	2	85138	2	1	54	
MAR 9,88	MAR 8,88	1600 1600	**** ****	2	0.2	2	85140	2	1	****	EK
MAR 12,88	MAR 11,88	1600 1600	**** ****	2	6.4	2	85142	2	1	24	N
MAR 13,88	MAR 12,88	1600 1600	**** ****	2	0.4	2	85144	2	1	****	EK
MAR 22,88	MAR 21,88	1600 1600	**** ****	2	0.8	2	85147	2	1	783	N
MAR 26,88	MAR 25,88	1600 1600	**** ****	2	16.8	2	85148	2	1	13	N
MAR 28,88	MAR 27,88	1600 1600	**** ****	3	3.6	2	85150	2	1	155	N
APR 9,88	APR 8,88	1600 1600	**** ****	1	****	*	85152	2	1	****	Q
APR 16,88	APR 15,88	1600 1600	**** ****	2	0.4	2	85154	2	1	****	EK
MAY 9,88	MAY 8,88	1600 1600	**** ****	1	16.0	1	85156	2	1	96	Q
MAY 10,88	MAY 9,88	1600 1600	**** ****	1	2.0	1	85158	2	1	60	Q
MAY 11,88	MAY 10,88	1600 1600	**** ****	1	4.0	1	85160	2	1	88	Q
MAY 12,88	MAY 11,88	1600 1600	**** ****	1	5.8	1	85162	2	1	107	Q
MAY 13,88	MAY 12,88	1600 1600	**** ****	1	0.1	1	85164	2	1	****	EK
MAY 15,88	MAY 14,88	1600 1600	**** ****	1	9.0	1	85166	2	1	61	Q
MAY 22,88	MAY 21,88	1600 1600	**** ****	1	5.8	1	85168	2	1	****	EG
MAY 26,88	MAY 25,88	1600 1600	**** ****	1	6.6	1	85170	2	1	U 18	G
MAY 27,88	MAY 26,88	1600 1600	**** ****	1	10.0	1	85172	2	1	U 54	G
MAY 31,88	MAY 30,88	1600 1600	**** ****	1	4.0	1	85174	2	1	65	Q
JUN 1,88	MAY 31,88	1600 1600	**** ****	1	16.4	1	85176	2	1	106	Q
JUN 8,88	JUN 7,88	1600 1600	**** ****	1	6.0	1	85180	2	1	****	EFK
JUN 13,88	JUN 12,88	1600 1600	**** ****	1	10.0	1	85182	2	1	93	Q
JUN 14,88	JUN 13,88	1600 1600	**** ****	1	8.4	1	85184	2	1	104	
JUN 19,88	JUN 18,88	1600 1600	**** ****	1	10.4	1	85186	2	1	86	Q

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : DAWSON/DAILY/AEROCHEM./6131

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REMOVAL DATE	EXPOSURE DATE	VOLUME ML	CONDUCT. UMHO/CM	PH FIELD	PH LAB	TOTAL H+ TO PH8.3 MG/L	TOTAL H+ GRAN MG/L	SULPHATE MG/L	NITRATE AS N MG/L
JAN 1,88	DEC 31,87	78.0	34.5	*****	4.24	*****	0.0877	2.00	0.89
JAN 12,88	JAN 11,88	113.0	5.0	*****	5.23	*****	0.0283	0.40	0.21
JAN 21,88	JAN 20,88	*****	*****	*****	*****	*****	*****	*****	*****
JAN 22,88	JAN 21,88	188.0	17.0	*****	4.45	*****	0.0551	0.75	0.58
JAN 23,88	JAN 22,88	13.0	3.5	*****	5.23	*****	0.0276	0.35	0.18
JAN 29,88	JAN 28,88	42.0	18.0	*****	4.50	*****	0.0574	1.25	0.50
JAN 31,88	JAN 30,88	225.0	17.0	*****	4.41	*****	0.0601	0.85	0.44
FEB 7,88	FEB 6,88	109.0	8.5	*****	4.81	*****	0.0380	0.65	0.18
FEB 14,88	FEB 13,88	*****	*****	*****	*****	*****	*****	*****	*****
FEB 16,88	FEB 15,88	63.0	24.5	*****	D 4.49	*****	D 0.0554	2.20	0.61
FEB 20,88	FEB 19,88	*****	*****	*****	*****	*****	*****	*****	*****
FEB 21,88	FEB 20,88	*****	*****	*****	*****	*****	*****	*****	*****
FEB 22,88	FEB 21,88	134.0	14.0	*****	4.92	*****	0.0325	1.20	0.42
FEB 28,88	FEB 27,88	34.0	7.0	*****	5.73	*****	0.0214	0.55	0.25
MAR 1,88	FEB 29,88	49.0	16.0	*****	UG 6.27	*****	0.0249	2.40	0.61
MAR 6,88	MAR 5,88	63.0	23.5	*****	UG 6.95	*****	0.0199	5.40	0.50
MAR 8,88	MAR 7,88	334.0	22.5	*****	4.39	*****	0.0629	2.10	0.32
MAR 9,88	MAR 8,88	*****	*****	*****	*****	*****	*****	*****	*****
MAR 12,88	MAR 11,88	100.0	11.0	*****	4.84	*****	0.0359	0.55	0.28
MAR 13,88	MAR 12,88	*****	*****	*****	*****	*****	*****	*****	*****
MAR 22,88	MAR 21,88	402.0	17.5	*****	4.59	*****	0.0479	1.70	0.28
MAR 26,88	MAR 25,88	148.0	45.0	*****	4.52	*****	0.0693	UG 7.55	1.16
MAR 28,88	MAR 27,88	359.0	22.0	*****	4.39	*****	0.0653	2.25	0.24
APR 9,88	APR 8,88	39.0	UG 95.5	*****	!IS *****	*****	!IS *****	UG 7.50	UG 2.00
APR 16,88	APR 15,88	*****	*****	*****	*****	*****	*****	*****	*****
MAY 9,88	MAY 8,88	993.0	14.0	*****	5.17	*****	0.0358	2.95	0.40
MAY 10,88	MAY 9,88	78.0	13.5	*****	4.91	*****	0.0357	1.70	0.43
MAY 11,88	MAY 10,88	226.0	3.5	*****	5.63	*****	0.0207	0.35	0.11
MAY 12,88	MAY 11,88	398.0	6.5	*****	5.16	*****	0.0259	0.65	0.12
MAY 13,88	MAY 12,88	*****	*****	*****	*****	*****	*****	*****	*****
MAY 15,88	MAY 14,88	356.0	14.5	*****	5.49	*****	0.0235	2.65	0.37
MAY 22,88	MAY 21,88	*****	*****	*****	*****	*****	*****	*****	*****
MAY 26,88	MAY 25,88	77.0	12.5	*****	UG 7.35	*****	0.0153	1.60	0.49
MAY 27,88	MAY 26,88	347.0	8.5	*****	5.70	*****	0.0202	1.40	0.28
MAY 31,88	MAY 30,88	168.0	22.5	*****	5.06	*****	0.0349	2.80	0.94
JUN 1,88	MAY 31,88	1119.0	9.0	*****	6.16	*****	0.0173	1.35	0.29
JUN 8,88	JUN 7,88	*****	*****	*****	*****	*****	*****	*****	*****
JUN 13,88	JUN 12,88	600.0	25.5	*****	5.55	*****	0.0254	4.60	0.89
JUN 14,88	JUN 13,88	560.0	12.0	*****	5.30	*****	0.0241	1.85	0.41
JUN 19,88	JUN 18,88	574.0	12.5	*****	5.37	*****	0.0239	1.35	0.61

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : DAWSON/DAILY/AEROCHEM./6131

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REMOVAL DATE	EXPOSURE DATE	CALCIUM MG/L	CHLORIDE MG/L	MAGNESIUM MG/L	POTASSIUM MG/L	SODIUM MG/L	AMMONIUM AS N MG/L	FREE H+ LAB MG/L
JAN 1,88	DEC 31,87	0.28	UG 0.49	<T 0.025	0.040	0.300	0.355	0.0575
JAN 12,88	JAN 11,88	0.14	0.20	<T 0.020	<T 0.025	0.130	0.070	0.0059
JAN 21,88	JAN 20,88	*****	*****	*****	*****	*****	*****	*****
JAN 22,88	JAN 21,88	0.20	0.18	0.030	0.030	0.105	0.100	0.0355
JAN 23,88	JAN 22,88	!IS *****	0.08	!IS *****	!IS *****	!IS *****	0.100	0.0059
JAN 29,88	JAN 28,88	!IS *****	0.20	!IS *****	!IS *****	!IS *****	0.170	0.0316
JAN 31,88	JAN 30,88	<T 0.06	0.10	<T 0.005	<T 0.015	0.040	0.060	0.0389
FEB 7,88	FEB 6,88	<T 0.06	0.22	<T 0.010	<T 0.010	0.135	<T 0.020	0.0155
FEB 14,88	FEB 13,88	*****	*****	*****	*****	*****	*****	*****
FEB 16,88	FEB 15,88	0.56	UG 0.49	0.055	0.080	UG 0.370	0.290	D 0.0324
FEB 20,88	FEB 19,88	*****	*****	*****	*****	*****	*****	*****
FEB 21,88	FEB 20,88	*****	*****	*****	*****	*****	*****	*****
FEB 22,88	FEB 21,88	0.30	0.23	0.045	<T 0.020	0.160	0.330	0.0120
FEB 28,88	FEB 27,88	<T 0.08	0.15	<T 0.015	<T 0.010	0.135	0.340	0.0019
MAR 1,88	FEB 29,88	0.30	0.15	0.035	0.070	0.105	1.080	UG 0.0005
MAR 6,88	MAR 5,88	<W 0.02	0.20	<W 0.005	0.065	UG 1.710	0.850	UG 0.0001
MAR 8,88	MAR 7,88	0.16	0.06	0.030	<T 0.015	0.025	0.270	0.0407
MAR 9,88	MAR 8,88	*****	*****	*****	*****	*****	*****	*****
MAR 12,88	MAR 11,88	0.12	0.12	<T 0.015	<T 0.020	0.075	0.040	0.0145
MAR 13,88	MAR 12,88	*****	*****	*****	*****	*****	*****	*****
MAR 22,88	MAR 21,88	0.14	0.13	<T 0.015	<T 0.020	0.115	0.290	0.0257
MAR 26,88	MAR 25,88	UG 1.80	0.37	0.190	UG 0.315	UG 0.380	1.320	0.0302
MAR 28,88	MAR 27,88	0.22	<T 0.03	<T 0.020	0.030	0.025	0.142	0.0407
APR 9,88	APR 8,88	!IS *****	0.40	!IS *****	!IS *****	!IS *****	UG 4.130	!IS *****
APR 16,88	APR 15,88	*****	*****	*****	*****	*****	*****	*****
MAY 9,88	MAY 8,88	0.86	0.08	0.155	0.115	0.035	0.506	0.0068
MAY 10,88	MAY 9,88	0.14	0.07	0.025	0.070	0.040	0.588	0.0123
MAY 11,88	MAY 10,88	<T 0.06	<W 0.01	<T 0.010	<T 0.010	<T 0.005	0.098	0.0023
MAY 12,88	MAY 11,88	<T 0.06	<T 0.02	<T 0.010	<T 0.020	<T 0.005	0.086	0.0069
MAY 13,88	MAY 12,88	*****	*****	*****	*****	*****	*****	*****
MAY 15,88	MAY 14,88	0.48	<T 0.04	0.090	0.065	UG 0.520	0.340	0.0032
MAY 22,88	MAY 21,88	*****	*****	*****	*****	*****	*****	*****
MAY 26,88	MAY 25,88	0.58	0.10	0.135	0.095	0.055	0.782	UG 0.0000
MAY 27,88	MAY 26,88	0.26	<T 0.05	0.045	0.040	0.035	0.446	0.0020
MAY 31,88	MAY 30,88	0.98	0.45	0.175	0.100	UG 0.235	0.718	0.0087
JUN 1,88	MAY 31,88	0.30	0.16	0.065	0.065	0.110	0.402	0.0007
JUN 8,88	JUN 7,88	*****	*****	*****	*****	*****	*****	*****
JUN 13,88	JUN 12,88	1.26	D 0.16	0.155	0.185	0.050	1.150	0.0028
JUN 14,88	JUN 13,88	0.30	0.06	0.040	0.065	0.025	0.626	0.0050
JUN 19,88	JUN 18,88	0.34	0.11	0.060	0.065	0.050	0.586	0.0043

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : DAWSON/DAILY/AEROCHEM./6131

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REMOVAL DATE	EXPOSURE DATE	SAMPLING START/END HR. HR.	PRECIP START/END HR. HR.	SAMPLE TYPE 01-RAIN 02-SNOW 03-COMP/04-OTHER	GAUGE DEPTH(MM)	GAUGE TYPE 01-STD. 02-NIPHER	SAMPLE NUMBER	PROJECT CODE 02-APIOS 03-SPECIAL	SUBPROJECT CODE 01-MOE 03-AES	SAMPLER EFFICI- ENCY (%)	COMMENTS FIELD OFFICE
JUN 22,88	JUN 21,88	1600 1600	**** ****	1	1.6	1	85188	2	1	43	N
JUN 24,88	JUN 23,88	1600 1600	**** ****	1	5.6	1	85190	2	1	83	H
JUN 25,88	JUN 24,88	1600 1600	**** ****	1	2.0	1	85192	2	1	****	Q
JUL 4,88	JUL 3,88	1600 1600	**** ****	1	0.2	1	85194	2	1	****	EK
JUL 8,88	JUL 7,88	1600 1600	**** ****	1	8.2	1	85196	2	1	88	EK
JUL 13,88	JUL 12,88	1600 1600	**** ****	1	20.8	1	85199	2	1	91	CQ
JUL 16,88	JUL 15,88	1600 1600	**** ****	1	9.8	1	85203	2	1	91	CD
JUL 20,88	JUL 19,88	1600 1600	**** ****	1	2.6	1	85205	2	1	4	Q
JUL 22,88	JUL 21,88	1600 1600	**** ****	1	2.0	1	85207	2	1	****	NHM
JUL 23,88	JUL 22,88	1600 1600	**** ****	1	4.2	1	85209	2	1	39	EK
JUL 29,88	JUL 28,88	1600 1600	**** ****	1	27.8	1	85211	2	1	U 6	D NH
JUL 31,88	JUL 30,88	1600 1600	**** ****	1	2.6	1	85213	2	1	****	I H
AUG 2,88	AUG 1,88	1600 1600	**** ****	1	46.6	1	85215	2	1	101	IEKF
AUG 4,88	AUG 3,88	1600 1600	**** ****	1	22.4	1	85219	2	1	97	N
AUG 5,88	AUG 4,88	1600 1600	**** ****	1	14.2	1	85221	2	1	91	D N
AUG 6,88	AUG 5,88	1600 1600	**** ****	1	2.0	1	85223	2	1	48	NM
AUG 7,88	AUG 6,88	1600 1600	**** ****	1	9.8	1	85225	2	1	93	DQ NHCM
AUG 8,88	AUG 7,88	1600 1600	**** ****	1	3.2	1	85227	2	1	55	D
AUG 14,88	AUG 13,88	1600 1600	**** ****	1	25.4	1	85229	2	1	97	CD H
AUG 17,88	AUG 16,88	1600 1600	**** ****	1	20.0	1	85233	2	1	93	N
AUG 23,88	AUG 22,88	1600 1600	**** ****	1	28.8	1	85235	2	1	101	C N
AUG 24,88	AUG 23,88	1600 1600	**** ****	1	1.6	1	85237	2	1	38	NH
AUG 25,88	AUG 24,88	1600 1600	**** ****	1	4.4	1	85239	2	1	79	N
AUG 27,88	AUG 26,88	1600 1600	**** ****	1	9.8	1	85241	2	1	91	HCM
AUG 28,88	AUG 27,88	1600 1600	**** ****	1	4.4	1	85243	2	1	86	
AUG 29,88	AUG 28,88	1600 1600	**** ****	1	2.4	1	85245	2	1	45	C
SEP 1,88	AUG 31,88	1600 1600	**** ****	1	30.0	1	85247	2	1	U 23	NC
SEP 2,88	SEP 1,88	1600 1600	**** ****	1	20.0	1	85251	2	1	****	F
SEP 3,88	SEP 2,88	1600 1600	**** ****	1	8.0	1	85249	2	1	U 11	EKI
SEP 17,88	SEP 16,88	1600 1600	**** ****	1	6.4	1	85253	2	1	88	F
SEP 19,88	SEP 18,88	1600 1600	**** ****	1	19.8	1	85255	2	1	94	Q
SEP 22,88	SEP 21,88	1600 1600	**** ****	1	3.4	1	85257	2	1	U 40	I
SEP 24,88	SEP 23,88	1600 1600	**** ****	1	1.8	1	85259	2	1	58	
SEP 26,88	SEP 25,88	1600 1600	**** ****	1	5.2	1	85261	2	1	60	
SEP 27,88	SEP 26,88	1600 1600	**** ****	1	2.0	1	85263	2	1	37	
SEP 29,88	SEP 28,88	1600 1600	**** ****	1	5.0	1	85265	2	1	82	N
OCT 3,88	OCT 2,88	1600 1600	**** ****	1	6.0	1	85267	2	1	88	
OCT 4,88	OCT 3,88	1600 1600	**** ****	1	0.2	1	85269	2	1	****	H
OCT 16,88	OCT 15,88	1600 1600	**** ****	1	13.4	2	85273	2	1	85	EK
OCT 17,88	OCT 16,88	1600 1600	**** ****	1	0.2	2	85275	2	1	****	EK

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REMOVAL DATE	EXPOSURE DATE	CALCIUM	CHLORIDE	MAGNESIUM	POTASSIUM	SODIUM	AMMONIUM	FREE H+
		MG/L	MG/L	MG/L	MG/L	MG/L	AS N MG/L	LAB MG/L
JUN 22,88	JUN 21,88	0.32	0.08	0.055	0.075	0.045	0.324	0.0056
JUN 24,88	JUN 23,88	0.52	0.16	0.100	0.095	0.110	0.988	0.0063
JUN 25,88	JUN 24,88	*****	*****	*****	*****	*****	*****	*****
JUL 4,88	JUL 3,88	*****	*****	*****	*****	*****	*****	*****
JUL 8,88	JUL 7,88	0.24	0.09	0.050	D 0.195	0.035	D 1.130	0.0002
JUL 13,88	JUL 12,88	0.14	<T 0.04	<T 0.025	0.040	<T 0.015	0.322	0.0015
JUL 16,88	JUL 15,88	0.22	0.06	0.035	0.050	0.040	0.526	0.0055
JUL 20,88	JUL 19,88	<T 0.04	<W 0.01	<T 0.010	<T 0.020	0.025	<W 0.006	0.0058
JUL 22,88	JUL 21,88	*****	*****	*****	*****	*****	*****	*****
JUL 23,88	JUL 22,88	0.54	0.06	0.115	0.060	0.035	0.380	0.0005
JUL 29,88	JUL 28,88	0.28	<W 0.01	0.045	0.070	0.030	0.246	0.0026
JUL 31,88	JUL 30,88	*****	*****	*****	*****	*****	*****	*****
AUG 2,88	AUG 1,88	0.30	<W 0.01	0.045	0.030	0.030	0.276	0.0004
AUG 4,88	AUG 3,88	<W 0.02	<W 0.01	<W 0.005	<T 0.015	<T 0.005	0.156	!SM 0.0029
AUG 5,88	AUG 4,88	<W 0.02	<W 0.01	<W 0.005	<W 0.005	<W 0.005	0.006	0.0052
AUG 6,88	AUG 5,88	<W 0.02	<W 0.01	<W 0.005	<T 0.020	<T 0.020	0.100	0.0034
AUG 7,88	AUG 6,88	0.12	<W 0.01	<T 0.005	<T 0.020	<T 0.020	0.300	D 0.0002
AUG 8,88	AUG 7,88	0.60	D 0.77	0.065	0.055	B 0.700	1.100	0.0069
AUG 14,88	AUG 13,88	<W 0.02	0.07	<W 0.005	<T 0.010	0.050	0.120	0.0085
AUG 17,88	AUG 16,88	0.12	<W 0.01	<T 0.010	<T 0.020	0.065	0.260	0.0135
AUG 23,88	AUG 22,88	<T 0.08	<W 0.01	0.025	<T 0.015	0.140	0.210	!IS 0.0295
AUG 24,88	AUG 23,88	<T 0.04	<W 0.01	<T 0.010	<T 0.020	0.075	0.030	0.0056
AUG 25,88	AUG 24,88	<W 0.02	<W 0.01	<W 0.005	<W 0.005	<T 0.005	0.006	0.0065
AUG 27,88	AUG 26,88	0.10	0.20	0.035	<T 0.015	0.035	0.166	0.0047
AUG 28,88	AUG 27,88	<W 0.02	<W 0.01	<W 0.005	<W 0.005	<W 0.005	<T 0.016	0.0007
AUG 29,88	AUG 28,88	<W 0.02	<W 0.01	<W 0.005	<W 0.005	<T 0.010	LG 0.026	0.0000
SEP 1,88	AUG 31,88	0.26	<W 0.01	0.045	0.055	0.025	0.466	0.0000
SEP 2,88	SEP 1,88	*****	*****	*****	*****	*****	*****	*****
SEP 3,88	SEP 2,88	0.88	<T 0.02	0.250	0.125	UG 0.445	0.266	UG 0.0000
SEP 17,88	SEP 16,88	0.18	0.09	0.030	0.030	<T 0.020	0.428	0.0550
SEP 19,88	SEP 18,88	<T 0.04	0.10	<T 0.005	<T 0.010	<W 0.005	0.124	0.0141
SEP 22,88	SEP 21,88	0.94	0.19	0.085	0.110	0.110	!IS 0.065	!IS 0.0178
SEP 24,88	SEP 23,88	0.96	!IR 0.11	0.200	0.115	0.065	!IS 0.268	!IS 0.0794
SEP 26,88	SEP 25,88	0.12	0.11	<T 0.015	0.025	<W 0.005	0.326	0.0851
SEP 27,88	SEP 26,88	0.74	!IR 0.14	0.095	0.130	0.180	!IS 0.274	0.0044
SEP 29,88	SEP 28,88	0.14	0.14	<T 0.020	0.035	0.050	0.135	0.0078
OCT 3,88	OCT 2,88	0.14	0.14	0.035	<T 0.020	<W 0.005	0.174	0.0078
OCT 4,88	OCT 3,88	*****	*****	*****	*****	*****	*****	*****
OCT 16,88	OCT 15,88	0.16	<T 0.04	0.025	0.050	0.135	0.174	0.0078
OCT 17,88	OCT 16,88	*****	*****	*****	*****	*****	*****	*****

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : DAWSON/DAILY/AEROCHEM./6131

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REMOVAL DATE	EXPOSURE DATE	SAMPLING START/END HR. HR.	PRECIP START/END HR. HR.	SAMPLE TYPE 01-RAIN 02-SNOW 03-COMP/04-OTHER	GAUGE DEPTH(MM)	GAUGE TYPE 01-STD. 02-NIPHER	SAMPLE NUMBER	PROJECT CODE 02-APIOS 03-SPECIAL	SUBPROJECT CODE 01-MOE 03-AES	SAMPLER EFFICI- ENCY (%)	COMMENTS FIELD OFFICE	
OCT 19,88	OCT 18,88	1600 1600	****	****	2	9.2	2	85277	2	1	87	C
OCT 21,88	OCT 20,88	1600 1600	****	****	2	2.8	2	85279	2	1	40	NH
OCT 23,88	OCT 22,88	1600 1600	****	****	2	17.0	2	85281	2	1	72	N
OCT 24,88	OCT 23,88	1600 1600	****	****	2	4.8	2	85283	2	1	43	N
OCT 27,88	OCT 26,88	1600 1600	****	****	2	5.2	2	85285	2	1	115	
OCT 31,88	OCT 30,88	1600 1600	****	****	2	9.6	2	85287	2	1	25	N
NOV 1,88	OCT 31,88	1600 1600	****	****	2	2.0	2	85289	2	1	5	N
NOV 5,88	NOV 4,88	1600 1600	****	****	2	8.8	2	85291	2	1	3	N
NOV 6,88	NOV 5,88	1600 1600	****	****	2	0.2	2	85293	2	1	****	EK
NOV 8,88	NOV 7,88	1600 1600	****	****	2	2.0	2	85295	2	1	135	N
NOV 10,88	NOV 9,88	1600 1600	****	****	1	2.0	2	85297	2	1	113	
NOV 13,88	NOV 12,88	1600 1600	****	****	2	7.0	2	85299	2	1	****	IE
NOV 15,88	NOV 14,88	1600 1600	****	****	1	2.6	2	85301	2	1	61	CM
NOV 16,88	NOV 15,88	1600 1600	****	****	1	22.0	2	85303	2	1	60	NHM
NOV 17,88	NOV 16,88	1600 1600	****	****	3	18.2	2	85305	2	1	60	N
NOV 19,88	NOV 18,88	1600 1600	****	****	2	8.0	2	85307	2	1	37	N
NOV 26,88	NOV 25,88	1600 1600	****	****	2	9.4	2	85309	2	1	14	NHCH
DEC 12,88	DEC 11,88	1600 1600	****	****	2	6.0	2	85311	2	1	7	
DEC 13,88	DEC 12,88	1600 1600	****	****	2	0.1	2	85325	2	1	****	KE
DEC 18,88	DEC 17,88	1600 1600	****	****	2	6.8	2	85313	2	1	23	C
DEC 19,88	DEC 18,88	1600 1600	****	****	2	0.2	2	85327	2	1	****	EK
DEC 23,88	DEC 22,88	1600 1600	****	****	2	8.0	2	85329	2	1	****	EFI
DEC 27,88	DEC 26,88	1600 1600	****	****	2	10.0	2	85315	2	1	10	N
DEC 30,88	DEC 29,88	1600 1600	****	****	2	3.2	2	85317	2	1	U 56	FJ

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : DAWSON/DAILY/AEROCHEM./6131

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REMOVAL DATE	EXPOSURE DATE	VOLUME ML	CONDUCT. UMHO/CM	PH FIELD	PH LAB	TOTAL H+ TO PH8.3 MG/L	TOTAL H+ GRAN MG/L	SULPHATE MG/L	NITRATE AS N MG/L
OCT 19,88	OCT 18,88	516.0	3.0	*****	5.23	*****	0.0227	0.65	0.06
OCT 21,88	OCT 20,88	72.0	7.0	*****	5.33	*****	0.0234	1.07	0.35
OCT 23,88	OCT 22,88	795.0	4.0	*****	5.18	*****	0.0237	0.50	0.16
OCT 24,88	OCT 23,88	133.0	8.0	*****	4.86	*****	0.0286	0.70	0.12
OCT 27,88	OCT 26,88	384.0	9.0	*****	5.27	*****	0.0232	1.25	0.34
OCT 31,88	OCT 30,88	155.0	6.0	*****	5.52	*****	0.0202	0.75	0.29
NOV 1,88	OCT 31,88	7.0	!IS *****	*****	5.83	*****	0.0156	!IS *****	!IS *****
NOV 5,88	NOV 4,88	21.0	!IS *****	*****	UG 6.12	*****	0.0157	!IS *****	!IS *****
NOV 6,88	NOV 5,88	*****	*****	*****	*****	*****	*****	*****	*****
NOV 8,88	NOV 7,88	174.0	LG 2.5	*****	5.27	*****	0.0196	LG 0.05	0.11
NOV 10,88	NOV 9,88	145.0	10.0	*****	4.77	*****	0.0369	0.80	0.33
NOV 13,88	NOV 12,88	*****	*****	*****	*****	*****	*****	*****	*****
NOV 15,88	NOV 14,88	103.0	19.0	*****	4.25	*****	0.0781	2.15	0.27
NOV 16,88	NOV 15,88	858.0	10.0	*****	4.74	*****	0.0392	1.05	LG 0.02
NOV 17,88	NOV 16,88	703.0	10.5	*****	4.71	*****	0.0378	1.00	0.20
NOV 19,88	NOV 18,88	191.0	12.0	*****	4.59	*****	0.0446	0.65	0.33
NOV 26,88	NOV 25,88	88.0	9.0	*****	4.49	*****	0.0551	0.95	0.28
DEC 12,88	DEC 11,88	27.0	5.0	*****	!IS *****	*****	!IS *****	0.65	0.21
DEC 13,88	DEC 12,88	*****	*****	*****	*****	*****	*****	*****	*****
DEC 18,88	DEC 17,88	103.0	4.0	*****	5.15	*****	0.0244	0.40	0.26
DEC 19,88	DEC 18,88	*****	*****	*****	*****	*****	*****	*****	*****
DEC 23,88	DEC 22,88	*****	*****	*****	*****	*****	*****	*****	*****
DEC 27,88	DEC 26,88	65.0	26.5	*****	4.36	*****	0.0738	1.70	0.84
DEC 30,88	DEC 29,88	115.0	27.0	*****	4.48	*****	0.0557	0.40	0.57

ONTARIO HISTORY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : DAWSON/DAILY/AEROCHEM./6131

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REMOVAL DATE	EXPOSURE DATE	CALCIUM MG/L	CHLORIDE MG/L	MAGNESIUM MG/L	POTASSIUM MG/L	SODIUM MG/L	AMMONIUM AS N MG/L	FREE H+ LAB MG/L
OCT 19,88	OCT 18,88	<W 0.02	<T 0.02	<W 0.005	<T 0.005	<T 0.010	0.180	0.0059
OCT 21,88	OCT 20,88	0.20	D 0.11	0.040	D 0.040	0.055	0.360	0.0047
OCT 23,88	OCT 22,88	<T 0.06	<T 0.05	<T 0.005	<T 0.015	0.025	0.186	0.0066
OCT 24,88	OCT 23,88	<T 0.02	0.06	<W 0.005	<T 0.015	<T 0.015	0.096	0.0138
OCT 27,88	OCT 26,88	0.36	0.09	0.035	0.045	0.040	0.380	0.0054
OCT 31,88	OCT 30,88	0.28	0.07	0.030	0.035	<T 0.020	0.260	0.0030
NOV 1,88	OCT 31,88	<T 0.04	!IS *****	<W 0.005	<T 0.025	0.035	0.090	0.0015
NOV 5,88	NOV 4,88	0.20	!IS *****	0.030	0.105	0.045	0.056	UG 0.0008
NOV 6,88	NOV 5,88	*****	*****	*****	*****	*****	*****	*****
NOV 8,88	NOV 7,88	<W 0.02	0.06	<W 0.005	<W 0.005	<T 0.020	0.046	0.0054
NOV 10,88	NOV 9,88	<T 0.06	0.08	<T 0.010	<T 0.015	<T 0.020	0.276	0.0170
NOV 13,88	NOV 12,88	*****	*****	*****	*****	*****	*****	*****
NOV 15,88	NOV 14,88	<T 0.06	0.12	<T 0.010	<T 0.015	0.040	0.276	0.0562
NOV 16,88	NOV 15,88	<T 0.06	0.03	<T 0.005	<T 0.005	<T 0.010	0.126	0.0182
NOV 17,88	NOV 16,88	<T 0.04	0.03	<T 0.005	<T 0.005	<T 0.010	0.120	0.0195
NOV 19,88	NOV 18,88	<T 0.04	0.09	<T 0.005	<T 0.005	<T 0.015	0.136	0.0257
NOV 26,88	NOV 25,88	UG 1.80	<T 0.05	0.045	0.025	0.045	0.128	0.0324
DEC 12,88	DEC 11,88	0.14	0.10	0.025	<T 0.025	0.075	0.152	!IS *****
DEC 13,88	DEC 12,88	*****	*****	*****	*****	*****	*****	*****
DEC 18,88	DEC 17,88	0.28	0.08	<T 0.015	<W 0.005	0.040	0.028	0.0071
DEC 19,88	DEC 18,88	*****	*****	*****	*****	*****	*****	*****
DEC 23,88	DEC 22,88	*****	*****	*****	*****	*****	*****	*****
DEC 27,88	DEC 26,88	0.40	0.22	0.030	0.060	0.165	0.230	0.0437
DEC 30,88	DEC 29,88	0.14	UG 3.73	<T 0.010	<T 0.015	U 2.140	0.038	0.0331

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : FERNBERG/DAILY/AEROCHEM

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REMOVAL DATE	EXPOSURE DATE	SAMPLING START/END HR. HR.	PRECIP START/END HR. HR.	SAMPLE TYPE 01-RAIN 02-SNOW 03-COMP/04-OTHER	GAUGE DEPTH(MM)	GAUGE TYPE 01-STD. 02-NIPHER	SAMPLE NUMBER	PROJECT CODE 02-APIOS 03-SPECIAL	SUBPROJECT CODE 01-MOE 03-AES	SAMPLER EFFICI- ENCY (%)	COMMENTS FIELD OFFICE
JAN 2,88	JAN 1,88	830 830	600 900	2	0.8	2	31947	2	1	23	N
JAN 3,88	JAN 2,88	830 830	2400 600	2	0.6	2	31948	2	1	31	N
JAN 8,88	JAN 7,88	830 830	800 1400	2	0.8	2	31949	2	1	1	Q XN
JAN 13,88	JAN 10,88	830 1030	2400 700	2	13.2	2	31950	2	1	28	NHMY3
JAN 14,88	JAN 13,88	1030 830	1000 1400	2	2.0	2	31951	2	1	35	NHM
JAN 20,88	JAN 19,88	830 730	2200 600	2	6.5	2	31952	2	1	29	N
JAN 21,88	JAN 20,88	730 730	1000 1400	2	0.1	2	31953	2	1	****	EK
JAN 23,88	JAN 22,88	730 830	800 1300	2	1.6	2	31954	2	1	21	N
JAN 24,88	JAN 23,88	830 830	1100 1500	2	1.1	2	31955	2	1	17	N
JAN 25,88	JAN 24,88	830 730	830 1430	2	****	2	31956	2	1	****	P
JAN 31,88	JAN 30,88	730 830	1800 2000	2	8.2	2	31957	2	1	64	M
FEB 7,88	FEB 6,88	800 830	1220 240	2	2.6	2	31958	2	1	39	N
FEB 9,88	FEB 8,88	930 930	300 800	2	0.1	2	31959	2	1	****	EK
FEB 14,88	FEB 13,88	830 830	600 830	2	0.5	2	31960	2	1	62	EK
FEB 15,88	FEB 14,88	830 830	1100 1700	2	1.0	2	31961	2	1	****	EK
FEB 16,88	FEB 15,88	830 830	2200 600	2	0.4	2	31962	2	1	81	
FEB 20,88	FEB 19,88	830 830	1500 2100	2	1.9	2	31963	2	1	78	
FEB 22,88	FEB 21,88	730 730	600 730	2	2.8	2	31964	2	1	50	HC
FEB 23,88	FEB 22,88	730 830	730 900	2	0.1	2	31965	2	1	****	EK
FEB 24,88	FEB 23,88	830 830	1830 2000	2	0.6	2	31966	2	1	13	XN
MAR 2,88	MAR 1,88	830 830	****	2	2.4	2	31967	2	1	31	U G
MAR 6,88	MAR 5,88	830 830	****	3	0.1	2	31968	2	1	****	EK
MAR 8,88	MAR 7,88	830 830	2400 830	2	7.2	2	31969	2	1	58	
MAR 9,88	MAR 8,88	830 830	830 1800	2	7.4	2	31970	2	1	38	N
MAR 11,88	MAR 10,88	830 830	2400 830	2	7.6	2	31971	2	1	36	N
MAR 15,88	MAR 12,88	830 800	****	2	20.0	2	31972	2	1	3	Q NY3
MAR 16,88	MAR 15,88	800 830	830 1300	2	0.1	2	31973	2	1	****	EK
MAR 18,88	MAR 17,88	800 800	1400 1600	2	0.1	2	31974	2	1	46	Q XN
MAR 22,88	MAR 21,88	830 830	1630 1830	2	0.8	2	31975	2	1	79	Q
MAR 25,88	MAR 24,88	830 830	1630 1830	3	13.2	2	31976	2	1	89	U F
MAR 26,88	MAR 25,88	830 830	1800 830	3	5.1	2	31979	2	1	****	EK
MAR 27,88	MAR 26,88	830 830	830 2300	2	0.1	2	31980	2	1	****	EK
MAR 28,88	MAR 27,88	830 830	1800 830	3	0.1	2	31981	2	1	87	Q
MAR 29,88	MAR 28,88	830 830	1100 2000	3	8.4	2	31982	2	1	****	EK
MAR 30,88	MAR 29,88	830 830	900 1400	2	0.1	2	31983	2	1	****	EK
APR 3,88	APR 2,88	830 830	1700 500	1	4.6	2	31984	2	1	89	Q
APR 4,88	APR 3,88	830 830	1900 2100	1	0.1	2	31985	2	1	****	EK
APR 10,88	APR 9,88	830 830	1200 1400	3	0.1	2	31986	2	1	****	EK
APR 14,88	APR 13,88	845 845	700 830	3	0.2	2	31987	2	1	280	Q N
APR 15,88	APR 14,88	845 830	****	2	0.1	2	31988	2	1	****	EK

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REMOVAL DATE	EXPOSURE DATE	SAMPLING START/END HR. HR.		PRECIP START/END HR. HR.		SAMPLE TYPE 01-RAIN 02-SNOW 03-COMP/04-OTHER	GAUGE DEPTH(MM)	GAUGE TYPE 01-STD. 02-NIPHER	SAMPLE NUMBER	PROJECT CODE 02-APIOS 03-SPECIAL	SUBPROJECT CODE 01-MOE 03-AES	SAMPLER EFFICI- ENCY (%)	COMMENTS		
													FIELD	OFFICE	
APR 23,88	APR 22,88	830	830	****	****	1	0.1	1	31990	2	1	****	EK		
APR 26,88	APR 25,88	800	800	1600	1700	1	0.1	1	31991	2	1	421			N
MAY 7,88	MAY 6,88	830	830	****	****	1	0.1	1	31993	2	1	****	EK		
MAY 8,88	MAY 7,88	830	830	30	230	1	3.1	1	31994	2	1	102	Q		
MAY 9,88	MAY 8,88	830	800	****	800	1	26.6	1	31995	2	1	101			
MAY 10,88	MAY 9,88	800	800	800	1300	1	12.5	1	31998	2	1	87			M
MAY 11,88	MAY 10,88	800	830	530	800	1	2.2	1	31999	2	1	100	Q		
MAY 12,88	MAY 11,88	830	830	430	630	1	2.4	1	32000	2	1	92			H
MAY 13,88	MAY 12,88	830	830	1430	1800	1	9.6	1	85800	2	1	92	Q		H
MAY 14,88	MAY 13,88	830	800	1200	1500	1	0.1	1	85801	2	1	****	EK		
MAY 15,88	MAY 14,88	800	800	1100	1200	1	1.0	1	85802	2	1	63	Q		
MAY 22,88	MAY 21,88	800	830	1000	1200	1	3.2	1	85803	2	1	102	Q		
MAY 27,88	MAY 26,88	830	800	200	500	1	1.0	1	85804	2	1	87			
MAY 30,88	MAY 29,88	800	830	1700	1900	1	6.6	1	85805	2	1	79	Q		
JUN 2,88	JUN 1,88	830	830	100	600	1	0.4	1	85806	2	1	58	Q		
JUN 8,88	JUN 7,88	830	830	230	530	1	12.0	1	85808	2	1	95	QJ		
JUN 13,88	JUN 12,88	830	830	****	100	1	6.2	1	85811	2	1	105	Q		H
JUN 14,88	JUN 13,88	830	830	****	100	1	13.4	1	85812	2	1	100	Q		
JUN 15,88	JUN 14,88	830	830	200	600	1	2.2	1	85813	2	1	68	Q		CM
JUN 16,88	JUN 15,88	830	830	1900	2100	1	8.6	1	85814	2	1	92	Q		
JUN 19,88	JUN 18,88	830	830	2330	****	1	15.0	1	85815	2	1	96	Q		
JUN 22,88	JUN 21,88	830	830	2130	2230	1	23.8	1	85816	2	1	107			
JUN 24,88	JUN 23,88	730	730	300	630	1	3.5	1	85817	2	1	90	Q		
JUN 25,88	JUN 24,88	730	830	800	1000	1	8.4	1	85818	2	1	98	Q		
JUN 26,88	JUN 25,88	830	830	2000	2100	1	0.6	1	85819	2	1	7	U	G	X
JUN 28,88	JUN 27,88	830	830	330	730	1	12.6	1	85820	2	1	103	Q		
JUN 29,88	JUN 28,88	830	800	730	900	1	3.6	1	85821	2	1	58	Q		HCM
JUL 6,88	JUL 5,88	730	745	800	900	1	11.0	1	85823	2	1	100	A		HM
JUL 8,88	JUL 7,88	800	800	1730	1830	1	3.8	1	85826	2	1	97	C		H
JUL 13,88	JUL 12,88	820	820	100	400	1	8.0	1	85828	2	1	100	C		HM
JUL 15,88	JUL 13,88	820	1700	330	700	1	40.0	1	85829	2	1	0	U	FQ	HCMY2
JUL 19,88	JUL 18,88	830	830	2130	2230	1	0.2	1	85830	2	1	70	Q		HM
JUL 21,88	JUL 20,88	800	800	1530	1630	1	0.2	1	85831	2	1	23	CE		N
JUL 24,88	JUL 23,88	900	900	330	530	1	3.1	1	85832	2	1	96	Q		HM
JUL 27,88	JUL 26,88	745	745	630	700	1	0.4	1	85833	2	1	23	Q		NM
JUL 29,88	JUL 28,88	800	800	1700	1800	1	45.0	1	85834	2	1	0	U	FD	
JUL 30,88	JUL 29,88	800	830	1000	1100	1	20.3	1	85835	2	1	105			H
AUG 1,88	JUL 31,88	745	745	500	730	1	5.5	1	85837	2	1	89	C		H
AUG 2,88	AUG 1,88	745	730	330	630	1	14.6	1	85838	2	1	101	Q		HM
AUG 3,88	AUG 2,88	730	715	900	1200	1	0.2	1	85841	2	1	93	CDQ		

ONTARIO MINISTRY OF THE ENVIRONMENT
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REMOVAL DATE	EXPOSURE DATE	VOLUME ML	CONDUCT. UMHO/CM	PH FIELD	PH LAB	TOTAL H+ TO PH8.3 MG/L	TOTAL H+ GRAN MG/L	SULPHATE MG/L	NITRATE AS N MG/L
APR 23,88	APR 22,88	*****	*****	*****	*****	*****	*****	*****	*****
APR 26,88	APR 25,88	27.0	!IS *****	*****	UG 7.03	*****	0.0132	!IS *****	!IS *****
MAY 7,88	MAY 6,88	*****	*****	*****	*****	*****	*****	*****	*****
MAY 8,88	MAY 7,88	203.0	20.0	*****	6.59	*****	0.0204	3.85	0.53
MAY 9,88	MAY 8,88	1739.0	7.0	*****	4.82	*****	0.0341	0.80	0.15
MAY 10,88	MAY 9,88	699.0	6.0	*****	4.96	*****	0.0268	0.40	0.10
MAY 11,88	MAY 10,88	142.0	D 15.5	*****	D 6.67	*****	0.0201	2.20	0.60
MAY 12,88	MAY 11,88	143.0	5.5	*****	5.52	*****	0.0208	0.65	0.22
MAY 13,88	MAY 12,88	570.0	3.0	*****	5.78	*****	0.0173	0.40	0.09
MAY 14,88	MAY 13,88	*****	*****	*****	*****	*****	*****	*****	*****
MAY 15,88	MAY 14,88	41.0	B 42.5	*****	UG 6.90	*****	0.0216	B 8.10	UG 1.59
MAY 22,88	MAY 21,88	210.0	UG 41.0	*****	4.35	*****	0.0759	UG 5.55	1.06
MAY 27,88	MAY 26,88	56.0	16.0	*****	D 6.72	*****	0.0192	1.90	0.53
MAY 30,88	MAY 29,88	336.0	22.5	*****	4.46	*****	UG 0.0552	2.50	0.48
JUN 2,88	JUN 1,88	15.0	7.0	*****	5.07	*****	0.0207	0.35	0.24
JUN 8,88	JUN 7,88	736.0	11.0	*****	4.94	*****	0.0282	1.50	0.21
JUN 13,88	JUN 12,88	420.0	24.0	*****	5.58	*****	0.0257	4.40	0.83
JUN 14,88	JUN 13,88	862.0	10.0	*****	5.40	*****	0.0231	1.40	0.30
JUN 15,88	JUN 14,88	96.0	LG 1.5	*****	6.02	*****	0.0130	<W 0.05	<W 0.01
JUN 16,88	JUN 15,88	512.0	6.5	*****	4.92	*****	0.0245	0.65	0.07
JUN 19,88	JUN 18,88	929.0	8.5	*****	5.34	*****	0.0201	0.80	0.35
JUN 22,88	JUN 21,88	1639.0	D 7.5	*****	5.34	*****	0.0194	0.80	0.21
JUN 24,88	JUN 23,88	204.0	15.0	*****	UG 6.83	*****	0.0125	1.45	0.70
JUN 25,88	JUN 24,88	529.0	12.0	*****	6.08	*****	0.0192	1.55	0.53
JUN 26,88	JUN 25,88	3.0	*****	*****	*****	*****	*****	*****	*****
JUN 28,88	JUN 27,88	836.0	3.5	*****	5.40	*****	0.0168	0.30	0.11
JUN 29,88	JUN 28,88	136.0	U 1.5	*****	6.49	*****	0.0160	<W 0.05	<W 0.01
JUL 6,88	JUL 5,88	706.0	7.5	*****	6.74	*****	0.0190	1.05	0.36
JUL 8,88	JUL 7,88	237.0	8.0	*****	5.31	*****	0.0282	0.95	0.41
JUL 13,88	JUL 12,88	517.0	10.0	*****	5.56	*****	0.0491	1.65	0.33
JUL 15,88	JUL 13,88	5.0	10.0	*****	6.52	*****	0.0158	<W 0.05	<T 0.01
JUL 19,88	JUL 18,88	9.0	3.0	*****	UG 7.04	*****	0.0168	0.30	0.13
JUL 21,88	JUL 20,88	3.0	!SM *****	*****	!SM *****	*****	!SM *****	!SM *****	!SM *****
JUL 24,88	JUL 23,88	191.0	12.0	*****	UG 6.99	*****	0.0166	1.75	0.66
JUL 27,88	JUL 26,88	6.0	10.0	*****	UG 7.29	*****	0.0148	1.25	0.31
JUL 29,88	JUL 28,88	6.0	3.0	*****	6.37	*****	0.0171	0.30	0.15
JUL 30,88	JUL 29,88	1369.0	6.5	*****	6.06	*****	0.0201	0.90	0.28
AUG 1,88	JUL 31,88	317.0	5.5	*****	6.14	*****	0.0192	0.65	0.26
AUG 2,88	AUG 1,88	947.0	10.0	*****	UG 7.05	*****	0.0241	1.15	0.47
AUG 3,88	AUG 2,88	12.0	2.5	*****	!IS *****	*****	!IS *****	<T 0.15	0.11

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REMOVAL DATE	EXPOSURE DATE	CALCIUM MG/L	CHLORIDE MG/L	MAGNESIUM MG/L	POTASSIUM MG/L	SODIUM MG/L	AMMONIUM AS N MG/L	FREE H+ LAB MG/L
APR 23,88	APR 22,88	*****	*****	*****	*****	*****	*****	*****
APR 26,88	APR 25,88	!IS *****	!IS *****	!IS *****	!IS *****	!IS *****	*****	*****
MAY 7,88	MAY 6,88	*****	*****	*****	*****	*****	0.074	UG 0.0001
MAY 8,88	MAY 7,88	0.76	0.11	0.145	0.125	0.030	1.120	0.0003
MAY 9,88	MAY 8,88	<T 0.02	<W 0.01	<T 0.005	0.025	<T 0.005	0.124	0.0151
MAY 10,88	MAY 9,88	<W 0.02	<T 0.03	<W 0.005	<T 0.025	<T 0.010	LG 0.016	0.0110
MAY 11,88	MAY 10,88	0.64	0.10	0.155	D 0.100	0.030	D 0.816	D 0.0002
MAY 12,88	MAY 11,88	0.12	<T 0.05	<T 0.020	0.025	<T 0.015	D 0.236	0.0030
MAY 13,88	MAY 12,88	<W 0.02	0.05	<W 0.005	<T 0.015	<W 0.005	0.186	0.0017
MAY 14,88	MAY 13,88	*****	*****	*****	*****	*****	*****	*****
MAY 15,88	MAY 14,88	1.90	0.26	0.320	B 0.320	UG 1.270	D 1.820	UG 0.0001
MAY 22,88	MAY 21,88	0.80	0.18	0.130	0.055	0.070	1.290	0.0447
MAY 27,88	MAY 26,88	!IS *****	0.15	!IS *****	!IS *****	!IS *****	D 0.840	D 0.0002
MAY 30,88	MAY 29,88	0.22	0.11	0.035	0.095	0.040	0.528	0.0347
JUN 2,88	JUN 1,88	!IS *****	0.11	!IS *****	!IS *****	!IS *****	0.034	0.0085
JUN 8,88	JUN 7,88	0.14	0.05	0.030	0.035	<T 0.015	0.348	0.0115
JUN 13,88	JUN 12,88	1.10	0.15	0.130	0.165	0.050	1.200	0.0026
JUN 14,88	JUN 13,88	D 0.20	<T 0.04	0.025	0.055	<T 0.015	0.462	0.0040
JUN 15,88	JUN 14,88	<W 0.02	<W 0.01	<W 0.005	<T 0.005	<T 0.010	<T 0.020	0.0010
JUN 16,88	JUN 15,88	<W 0.02	<T 0.02	<W 0.005	<T 0.020	<T 0.015	0.054	0.0120
JUN 19,88	JUN 18,88	0.14	<T 0.05	0.025	0.030	0.030	0.370	0.0046
JUN 22,88	JUN 21,88	0.10	<T 0.05	<T 0.015	D 0.025	0.025	0.280	0.0046
JUN 24,88	JUN 23,88	D 1.30	0.16	0.125	0.095	0.075	0.616	UG 0.0001
JUN 25,88	JUN 24,88	0.36	0.12	0.050	0.065	0.050	0.720	0.0008
JUN 26,88	JUN 25,88	*****	*****	*****	*****	*****	*****	*****
JUN 28,88	JUN 27,88	<T 0.04	<T 0.01	<T 0.010	<T 0.005	<T 0.010	0.088	0.0040
JUN 29,88	JUN 28,88	<T 0.02	0.30	<W 0.005	<T 0.005	<T 0.015	<W 0.006	0.0003
JUL 6,88	JUL 5,88	0.14	0.12	<T 0.015	0.040	<T 0.020	0.436	0.0002
JUL 8,88	JUL 7,88	0.18	0.07	0.030	0.035	0.040	0.320	0.0049
JUL 13,88	JUL 12,88	0.20	D 0.52	0.030	<T 0.024	<T 0.018	0.370	0.0028
JUL 15,88	JUL 13,88	0.10	<W 0.01	<T 0.005	<T 0.015	0.035	<W 0.006	0.0003
JUL 19,88	JUL 18,88	0.24	<W 0.01	0.055	0.040	0.045	0.096	UG 0.0001
JUL 21,88	JUL 20,88	!NR *****	!SM *****	!NR *****	!NR *****	!NR *****	!SM *****	!SM *****
JUL 24,88	JUL 23,88	0.66	0.06	0.105	0.040	<T 0.020	0.450	UG 0.0001
JUL 27,88	JUL 26,88	0.64	0.06	0.155	0.090	0.215	0.506	UG 0.0001
JUL 29,88	JUL 28,88	0.20	0.06	0.055	0.045	0.035	0.206	0.0004
JUL 30,88	JUL 29,88	0.18	<W 0.01	<T 0.020	0.035	0.030	0.326	0.0009
AUG 1,88	JUL 31,88	0.16	<W 0.01	0.030	0.025	<T 0.020	0.296	0.0007
AUG 2,88	AUG 1,88	0.62	0.10	0.105	0.050	0.070	0.366	UG 0.0001
AUG 3,88	AUG 2,88	0.16	<W 0.01	<T 0.015	<T 0.025	0.055	0.106	!IS *****

ONTARIO MINISTRY OF THE ENVIRONMENT
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REMOVAL DATE	EXPOSURE DATE	SAMPLING START/END HR. HR.	PRECIP START/END HR. HR.	SAMPLE TYPE 01-RAIN 02-SNOW 03-COMP/04-OTHER	GAUGE DEPTH(MM)	GAUGE TYPE 01-STD. 02-NIPHER	SAMPLE NUMBER	PROJECT CODE 02-APIOS 03-SPECIAL	SUBPROJECT CODE 01-MOE 03-AES	SAMPLER EFFICI- ENCY (%)	COMMENTS FIELD OFFICE
AUG 4,88	AUG 3,88	715 815	1900 2200	1	5.8	1	85842	2	1	97	B HC
AUG 5,88	AUG 4,88	815 745	1000 1500	1	25.0	1	85843	2	1	101	NHCH
AUG 6,88	AUG 5,88	745 830	1000 1200	1	18.8	1	85846	2	1	97	NCM
AUG 8,88	AUG 7,88	745 745	830 1230	1	27.9	1	85847	2	1	104	NH
AUG 12,88	AUG 11,88	800 800	130 200	1	0.1	1	85848	2	1	****	EK
AUG 13,88	AUG 12,88	800 900	130 830	1	2.6	1	85849	2	1	88	H
AUG 14,88	AUG 13,88	900 800	2000 2400	1	50.0	1	85850	2	1	89	N
AUG 16,88	AUG 15,88	800 800	400 600	1	10.4	1	85851	2	1	94	
AUG 17,88	AUG 16,88	800 815	1900 400	1	69.2	1	85852	2	1	106	NH
AUG 20,88	AUG 19,88	845 845	****	1	2.8	1	85853	2	1	78	
AUG 21,88	AUG 20,88	845 1200	1000 1200	1	5.2	1	85854	2	1	87	HM
AUG 22,88	AUG 21,88	1200 730	200 600	1	1.0	1	85855	2	1	56	
AUG 23,88	AUG 22,88	730 900	830 1930	1	47.8	1	85856	2	1	103	N
AUG 24,88	AUG 23,88	900 830	1800 2000	1	0.1	1	85857	2	1	****	EK
AUG 25,88	AUG 24,88	830 715	1200 1300	1	13.8	1	85858	2	1	100	N
AUG 26,88	AUG 25,88	715 830	1100 1430	1	1.8	1	85859	2	1	59	HM
AUG 27,88	AUG 26,88	830 715	2130 330	1	5.0	1	85860	2	1	86	
AUG 28,88	AUG 27,88	715 845	****	1	6.8	1	85861	2	1	14	NHCH
AUG 29,88	AUG 28,88	845 700	1730 2030	1	2.0	1	85862	2	1	72	HCM
AUG 30,88	AUG 29,88	700 830	900 1200	1	1.0	1	85863	2	1	62	
SEP 1,88	AUG 31,88	730 730	130 330	1	24.6	1	85864	2	1	U 98	F
SEP 2,88	SEP 1,88	730 830	1800 2100	1	4.0	1	85867	2	1	80	H
SEP 5,88	SEP 4,88	900 900	1000 1100	1	1.0	1	85868	2	1	40	
SEP 9,88	SEP 8,88	830 830	****	1	0.1	1	85869	2	1	****	EK
SEP 11,88	SEP 10,88	830 830	****	1	0.1	1	85870	2	1	****	EK
SEP 12,88	SEP 11,88	830 730	100 500	1	0.8	1	85871	2	1	15	A
SEP 16,88	SEP 15,88	800 800	2000 200	1	4.0	1	85872	2	1	U 74	F HM
SEP 17,88	SEP 16,88	800 830	1300 1800	1	5.6	1	85873	2	1	89	
SEP 19,88	SEP 18,88	830 730	130 230	1	5.2	1	85874	2	1	82	A HCM
SEP 20,88	SEP 19,88	730 830	2300 500	1	9.8	1	85875	2	1	85	
SEP 21,88	SEP 20,88	830 815	1000 1600	1	1.4	1	85876	2	1	14	N
SEP 25,88	SEP 24,88	830 830	****	1	1.3	1	85877	2	1	57	HM
SEP 26,88	SEP 25,88	830 800	230 500	1	4.0	1	85878	2	1	92	
SEP 29,88	SEP 28,88	830 830	2000 200	1	4.4	1	85879	2	1	82	C
OCT 1,88	SEP 30,88	900 900	1800 2100	1	0.1	1	85880	2	1	****	EK
OCT 3,88	OCT 2,88	730 730	130 630	1	6.4	1	85881	2	1	19	NHM
OCT 4,88	OCT 3,88	730 800	****	3	****	1	85882	2	1	****	P HM
OCT 11,88	OCT 10,88	745 745	2400 500	3	1.0	2	85883	2	1	230	N
OCT 16,88	OCT 15,88	830 830	100 400	1	0.5	2	85884	2	1	243	N
OCT 17,88	OCT 16,88	830 900	830 1100	1	2.6	2	85885	2	1	108	

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REMOVAL DATE	EXPOSURE DATE	VOLUME ML	CONDUCT. UMHO/CM	PH FIELD	PH LAB	TOTAL H+ TO PH8.3 MG/L	TOTAL H+ GRAN MG/L	SULPHATE MG/L	NITRATE AS N MG/L
AUG 4,88	AUG 3,88	363.0	5.0	*****	5.19	*****	0.0278	0.40	0.30
AUG 5,88	AUG 4,88	1627.0	1.5	*****	5.40	*****	0.0214	<T 0.20	<T 0.05
AUG 6,88	AUG 5,88	1178.0	1.5	*****	5.33	*****	0.0211	<T 0.10	<T 0.04
AUG 8,88	AUG 7,88	1865.0	6.0	*****	5.13	*****	0.0277	0.65	0.27
AUG 12,88	AUG 11,88	*****	*****	*****	*****	*****	*****	*****	*****
AUG 13,88	AUG 12,88	148.0	14.5	*****	5.21	*****	0.0300	3.20	0.75
AUG 14,88	AUG 13,88	2860.0	2.0	*****	5.44	*****	0.0201	<T 0.25	<T 0.05
AUG 16,88	AUG 15,88	627.0	8.5	*****	6.68	*****	0.0193	1.25	0.44
AUG 17,88	AUG 16,88	4716.0	5.5	*****	5.91	*****	D 0.0195	0.95	0.21
AUG 20,88	AUG 19,88	140.0	5.5	*****	5.09	*****	0.0275	0.45	0.21
AUG 21,88	AUG 20,88	293.0	3.5	*****	5.06	*****	0.0240	<T 0.20	0.09
AUG 22,88	AUG 21,88	36.0	21.0	*****	!IS *****	*****	!IS *****	3.75	0.99
AUG 23,88	AUG 22,88	3176.0	11.0	*****	4.57	*****	0.0463	1.75	0.13
AUG 24,88	AUG 23,88	*****	*****	*****	*****	*****	*****	*****	*****
AUG 25,88	AUG 24,88	891.0	7.0	*****	4.97	*****	0.0311	1.05	<T 0.04
AUG 26,88	AUG 25,88	69.0	5.0	*****	5.22	*****	0.0247	<T 0.10	<T 0.04
AUG 27,88	AUG 26,88	277.0	12.0	*****	B 6.97	*****	D 0.0176	D 2.70	0.35
AUG 28,88	AUG 27,88	65.0	<T 1.0	*****	5.50	*****	0.0201	0.30	<T 0.03
AUG 29,88	AUG 28,88	93.0	2.0	*****	5.32	*****	0.0226	0.55	<T 0.04
AUG 30,88	AUG 29,88	40.0	3.0	*****	!IS *****	*****	!IS *****	<T 0.10	<T 0.04
SEP 1,88	AUG 31,88	1554.0	6.0	*****	6.19	*****	0.0208	1.00	0.21
SEP 2,88	SEP 1,88	206.0	8.0	*****	6.81	*****	0.0192	1.85	0.26
SEP 5,88	SEP 4,88	26.0	2.0	*****	!IS *****	*****	!IS *****	0.35	<T 0.03
SEP 9,88	SEP 8,88	*****	*****	*****	*****	*****	*****	*****	*****
SEP 11,88	SEP 10,88	*****	*****	*****	*****	*****	*****	*****	*****
SEP 12,88	SEP 11,88	8.0	!IS *****	*****	UG 6.90	*****	0.0249	!IS *****	!IS *****
SEP 16,88	SEP 15,88	192.0	9.0	*****	6.02	*****	0.0191	1.70	0.34
SEP 17,88	SEP 16,88	322.0	11.0	*****	D 4.58	*****	D 0.0425	1.40	0.17
SEP 19,88	SEP 18,88	275.0	5.0	*****	4.59	*****	0.0443	0.40	0.55
SEP 20,88	SEP 19,88	540.0	3.5	*****	5.16	*****	0.0217	0.40	0.11
SEP 21,88	SEP 20,88	13.0	!IS *****	*****	5.55	*****	0.0176	!IS *****	!IS *****
SEP 25,88	SEP 24,88	48.0	27.0	*****	UG 7.08	*****	0.0191	3.65	<T 0.02
SEP 26,88	SEP 25,88	238.0	8.5	*****	6.42	*****	0.0182	1.15	0.40
SEP 29,88	SEP 28,88	234.0	11.0	*****	4.29	*****	UG 0.0679	2.40	0.38
OCT 1,88	SEP 30,88	*****	*****	*****	*****	*****	*****	*****	*****
OCT 3,88	OCT 2,88	80.0	5.5	*****	5.16	*****	0.0235	<T 0.15	0.12
OCT 4,88	OCT 3,88	151.0	2.0	*****	5.45	*****	0.0178	0.30	<T 0.03
OCT 11,88	OCT 10,88	148.0	2.5	*****	5.42	*****	0.0199	0.45	<T 0.02
OCT 16,88	OCT 15,88	78.0	30.0	*****	UG 6.98	*****	0.0198	B 5.80	1.09
OCT 17,88	OCT 16,88	181.0	2.0	*****	5.85	*****	0.0165	0.40	0.05

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REMOVAL DATE	EXPOSURE DATE	CALCIUM MG/L	CHLORIDE MG/L	MAGNESIUM MG/L	POTASSIUM MG/L	SODIUM MG/L	AMMONIUM AS N MG/L	FREE H+ LAB MG/L
AUG 4,88	AUG 3,88	<T 0.10	0.16	0.035	B 0.265	<T 0.010	0.240	0.0065
AUG 5,88	AUG 4,88	<W 0.02	<W 0.01	<W 0.005	<W 0.005	<W 0.005	0.110	0.0040
AUG 6,88	AUG 5,88	<W 0.02	0.06	<W 0.005	<W 0.005	<W 0.005	<T 0.006	0.0047
AUG 8,88	AUG 7,88	<T 0.10	<W 0.01	<T 0.010	<T 0.020	<T 0.025	0.330	0.0074
AUG 12,88	AUG 11,88	*****	*****	*****	*****	*****	*****	*****
AUG 13,88	AUG 12,88	0.38	0.10	0.070	0.065	0.040	0.936	0.0062
AUG 14,88	AUG 13,88	<W 0.02	<W 0.01	<W 0.005	<T 0.005	<W 0.005	0.066	0.0036
AUG 16,88	AUG 15,88	0.16	0.06	0.030	0.045	0.030	0.800	0.0002
AUG 17,88	AUG 16,88	0.14	<W 0.01	0.030	0.030	0.025	0.426	0.0012
AUG 20,88	AUG 19,88	<T 0.08	<W 0.01	<T 0.015	0.025	<T 0.025	0.140	0.0081
AUG 21,88	AUG 20,88	<W 0.02	0.24	<W 0.005	<W 0.005	<T 0.015	<T 0.020	0.0087
AUG 22,88	AUG 21,88	0.90	0.19	0.195	0.135	0.035	1.440	!IS *****
AUG 23,88	AUG 22,88	<W 0.02	<W 0.01	<W 0.005	<T 0.010	<W 0.005	0.276	0.0269
AUG 24,88	AUG 23,88	*****	*****	*****	*****	*****	*****	*****
AUG 25,88	AUG 24,88	<T 0.02	<T 0.02	<T 0.015	<T 0.020	<T 0.015	D 0.186	0.0107
AUG 26,88	AUG 25,88	<W 0.02	0.84	<W 0.005	<T 0.010	<T 0.015	LG 0.030	0.0060
AUG 27,88	AUG 26,88	D 0.72	<T 0.04	D 0.210	0.080	B 0.270	0.540	B 0.0001
AUG 28,88	AUG 27,88	<T 0.04	<W 0.01	<T 0.010	<T 0.010	<T 0.005	0.090	0.0032
AUG 29,88	AUG 28,88	<W 0.02	<W 0.01	<T 0.005	<T 0.010	<T 0.010	0.066	0.0048
AUG 30,88	AUG 29,88	<W 0.02	0.16	<W 0.005	<W 0.005	<T 0.015	<T 0.006	!IS *****
SEP 1,88	AUG 31,88	0.14	<W 0.01	0.025	0.045	<T 0.010	0.426	0.0006
SEP 2,88	SEP 1,88	0.34	<W 0.01	0.100	0.060	UG 0.445	0.340	0.0002
SEP 5,88	SEP 4,88	<T 0.06	<T 0.02	<T 0.015	<T 0.020	0.100	<W 0.006	!IS *****
SEP 9,88	SEP 8,88	*****	*****	*****	*****	*****	*****	*****
SEP 11,88	SEP 10,88	*****	*****	*****	*****	*****	*****	*****
SEP 12,88	SEP 11,88	0.56	!IS *****	0.100	UG 0.220	UG 0.365	0.996	UG 0.0001
SEP 16,88	SEP 15,88	0.54	0.11	0.110	0.055	0.040	0.576	0.0010
SEP 17,88	SEP 16,88	<T 0.04	<T 0.01	<T 0.010	<W 0.005	<W 0.005	0.116	D 0.0263
SEP 19,88	SEP 18,88	0.26	0.09	0.025	0.035	0.045	0.680	0.0257
SEP 20,88	SEP 19,88	<W 0.02	<T 0.04	<W 0.005	<T 0.010	<W 0.005	0.116	0.0069
SEP 21,88	SEP 20,88	<T 0.04	!IS *****	<W 0.005	0.025	<T 0.020	<T 0.010	0.0028
SEP 25,88	SEP 24,88	1.52	0.11	0.320	0.135	0.160	2.010	UG 0.0001
SEP 26,88	SEP 25,88	0.28	<T 0.02	0.035	0.030	<T 0.015	D 0.686	0.0004
SEP 29,88	SEP 28,88	0.16	0.08	0.030	<T 0.020	<T 0.015	0.336	0.0513
OCT 1,88	SEP 30,88	*****	*****	*****	*****	*****	*****	*****
OCT 3,88	OCT 2,88	0.10	0.33	0.030	<T 0.020	D 0.185	0.126	0.0069
OCT 4,88	OCT 3,88	<W 0.02	0.07	<W 0.005	<W 0.005	<T 0.020	0.040	0.0035
OCT 11,88	OCT 10,88	<T 0.08	<T 0.03	<T 0.020	<T 0.020	<W 0.005	LG 0.026	0.0038
OCT 16,88	OCT 15,88	1.86	0.18	0.330	0.135	B 1.830	D 0.800	UG 0.0001
OCT 17,88	OCT 16,88	<T 0.02	0.03	<W 0.005	0.025	<T 0.015	0.160	0.0014

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REMOVAL DATE	EXPOSURE DATE	SAMPLING START/END HR. HR.	PRECIP START/END HR. HR.	SAMPLE TYPE 01-RAIN 02-SNOW 03-COMP/04-OTHER	GAUGE DEPTH(MM)	GAUGE TYPE 01-STD. 02-NIPHER	SAMPLE NUMBER	PROJECT CODE 02-APIOS 03-SPECIAL	SUBPROJECT CODE 01-MOE 03-AES	SAMPLER EFFICI- ENCY (%)	COMMENTS FIELD OFFICE
OCT 18,88	OCT 17,88	900 800	1330 1530	3	0.1	2	85886	2	1	109	NHCM
OCT 19,88	OCT 18,88	800 830	2100 2200	3	0.1	2	85887	2	1	233	NHCM
OCT 21,88	OCT 20,88	830 830	1400 2200	1	2.6	2	85888	2	1	103	
OCT 22,88	OCT 21,88	830 830	2000 2200	2	11.4	2	85889	2	1	97	
OCT 24,88	OCT 23,88	830 830	1300 1900	2	5.2	2	85890	2	1	6	Q NC
OCT 25,88	OCT 24,88	830 830	2000 2330	2	4.4	2	85891	2	1	****	FEK
OCT 26,88	OCT 25,88	830 800	1000 1400	2	1.4	2	85892	2	1	****	FEK
OCT 27,88	OCT 26,88	800 830	500 700	2	0.6	2	85893	2	1	26	
OCT 28,88	OCT 27,88	830 800	1200 1430	3	8.4	2	85894	2	1	61	HM
OCT 29,88	OCT 28,88	800 900	1800 700	2	0.7	2	85895	2	1	****	FEK
OCT 30,88	OCT 29,88	900 830	****	2	0.1	2	85896	2	1	****	EK
OCT 31,88	OCT 30,88	830 800	430 800	3	0.8	2	85897	2	1	27	H
NOV 1,88	OCT 31,88	800 800	800 1100	2	5.9	2	85898	2	1	47	NHM
NOV 6,88	NOV 5,88	900 900	****	2	10.6	2	85899	2	1	****	EKI
NOV 8,88	NOV 7,88	800 800	****	2	3.2	2	85900	2	1	62	
NOV 9,88	NOV 8,88	800 800	****	2	0.2	2	85901	2	1	241	NHC
NOV 10,88	NOV 9,88	800 845	****	3	5.4	2	85902	2	1	94	H
NOV 12,88	NOV 11,88	845 830	****	2	1.1	2	85903	2	1	80	HM
NOV 13,88	NOV 12,88	830 830	****	2	2.1	2	85904	2	1	64	
NOV 16,88	NOV 15,88	830 830	1800 830	3	22.3	2	85905	2	1	U 62	G C
NOV 17,88	NOV 16,88	830 830	1000 2400	2	17.1	2	85908	2	1	14	NC
NOV 19,88	NOV 18,88	830 830	230 700	2	2.3	2	85909	2	1	12	N
NOV 20,88	NOV 19,88	830 900	1000 1400	2	2.5	2	85910	2	1	U 8	FI C
DEC 1,88	NOV 25,88	815 1040	100 600	2	23.5	2	85912	2	1	U 28	G Z
DEC 7,88	DEC 6,88	830 830	600 600	2	4.8	2	85913	2	1	U 1	FIE
DEC 8,88	DEC 7,88	837 915	****	2	0.2	2	85914	2	1	****	EKI
DEC 9,88	DEC 8,88	915 845	****	2	0.2	2	85915	2	1	****	KEF
DEC 12,88	DEC 11,88	830 830	400 400	2	0.8	2	85916	2	1	U 83	FJ
DEC 13,88	DEC 12,88	830 800	830 830	2	5.0	2	85917	2	1	U 78	FJ H
DEC 14,88	DEC 13,88	830 855	2100 800	2	4.4	2	85918	2	1	U 59	FJ M
DEC 16,88	DEC 15,88	845 820	****	2	0.1	2	85919	2	1	U 78	FJ
DEC 17,88	DEC 16,88	830 930	1100 1100	2	0.5	2	85920	2	1	U 71	FJ
DEC 18,88	DEC 17,88	930 845	****	2	2.2	2	85921	2	1	U 82	FJ HM
DEC 19,88	DEC 18,88	845 835	930 930	2	0.4	2	85922	2	1	U 50	FJ HM
DEC 20,88	DEC 19,88	900 730	****	2	0.3	2	85939	2	1	U 41	F
DEC 21,88	DEC 20,88	745 845	****	2	1.5	2	85940	2	1	31	N
DEC 30,88	DEC 21,88	920 830	****	2	16.2	2	85941	2	1	63	Q Z
DEC 31,88	DEC 30,88	850 845	850 845	2	1.7	2	85942	2	1	32	N

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REMOVAL DATE	EXPOSURE DATE	VOLUME ML	CONDUCT. UMHO/CM	PH FIELD	PH LAB	TOTAL H+ TO PH8.3 MG/L	TOTAL H+ GRAN MG/L	SULPHATE MG/L	NITRATE AS N MG/L
OCT 18,88	OCT 17,88	7.0	LG 0.5	*****	5.96	*****	LG 0.0103	<T 0.10	<T 0.01
OCT 19,88	OCT 18,88	15.0	LG 2.0	*****	5.67	*****	0.0137	0.40	0.09
OCT 21,88	OCT 20,88	173.0	5.5	*****	5.06	*****	0.0265	0.60	0.21
OCT 22,88	OCT 21,88	709.0	6.5	*****	6.53	*****	0.0189	0.90	0.33
OCT 24,88	OCT 23,88	22.0	LG 2.0	*****	5.61	*****	0.0163	0.25	0.13
OCT 25,88	OCT 24,88	*****	*****	*****	*****	*****	*****	*****	*****
OCT 26,88	OCT 25,88	*****	*****	*****	*****	*****	*****	*****	*****
OCT 27,88	OCT 26,88	10.0	5.0	*****	5.92	*****	0.0150	0.95	0.25
OCT 28,88	OCT 27,88	331.0	3.0	*****	6.44	*****	0.0156	0.50	0.15
OCT 29,88	OCT 28,88	*****	*****	*****	*****	*****	*****	*****	*****
OCT 30,88	OCT 29,88	*****	*****	*****	*****	*****	*****	*****	*****
OCT 31,88	OCT 30,88	14.0	6.0	*****	5.82	*****	0.0146	0.80	0.35
NOV 1,88	OCT 31,88	180.0	3.0	*****	6.25	*****	0.0146	0.44	0.21
NOV 6,88	NOV 5,88	*****	*****	*****	*****	*****	*****	*****	*****
NOV 8,88	NOV 7,88	128.0	4.5	*****	5.12	*****	0.0228	<T 0.15	0.17
NOV 9,88	NOV 8,88	31.0	5.5	*****	5.40	*****	0.0165	1.00	0.19
NOV 10,88	NOV 9,88	326.0	6.0	*****	6.10	*****	0.0172	1.00	0.39
NOV 12,88	NOV 11,88	57.0	4.0	*****	6.54	*****	LG 0.0106	0.60	0.21
NOV 13,88	NOV 12,88	87.0	12.5	*****	4.48	*****	0.0528	1.00	0.42
NOV 16,88	NOV 15,88	895.0	7.0	*****	4.70	*****	0.0365	0.80	0.19
NOV 17,88	NOV 16,88	158.0	LG 1.0	*****	5.41	*****	0.0194	<T 0.10	LG 0.05
NOV 19,88	NOV 18,88	18.0	U *****	*****	4.51	*****	0.0492	0.45	0.58
NOV 20,88	NOV 19,88	14.0	6.0	*****	4.73	*****	0.0349	0.30	0.24
DEC 1,88	NOV 25,88	430.0	LG 3.0	*****	5.23	*****	0.0249	0.25	<T 0.05
DEC 7,88	DEC 6,88	4.0	*****	*****	*****	*****	*****	*****	*****
DEC 8,88	DEC 7,88	*****	*****	*****	*****	*****	*****	*****	*****
DEC 9,88	DEC 8,88	*****	*****	*****	*****	*****	*****	*****	*****
DEC 12,88	DEC 11,88	43.0	13.0	*****	!IS *****	*****	!IS *****	0.90	0.69
DEC 13,88	DEC 12,88	250.0	7.0	*****	5.18	*****	0.0291	1.05	0.24
DEC 14,88	DEC 13,88	167.0	3.5	*****	5.23	*****	0.0249	LG 0.15	0.15
DEC 16,88	DEC 15,88	5.0	LG 2.5	*****	!IS *****	*****	!IS *****	0.25	0.15
DEC 17,88	DEC 16,88	23.0	4.0	*****	!IS *****	*****	!IS *****	0.35	0.20
DEC 18,88	DEC 17,88	117.0	4.0	*****	5.33	*****	0.0241	0.26	0.18
DEC 19,88	DEC 18,88	13.0	6.5	*****	UG 6.34	*****	0.0179	0.65	0.36
DEC 20,88	DEC 19,88	8.0	9.0	*****	!IS *****	*****	!IS *****	0.75	0.30
DEC 21,88	DEC 20,88	30.0	28.5	*****	!IS *****	*****	!IS *****	1.85	0.84
DEC 30,88	DEC 21,88	655.0	16.0	*****	4.56	*****	0.0469	1.05	0.49
DEC 31,88	DEC 30,88	35.0	13.0	*****	!IS *****	*****	!IS *****	0.45	0.53

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : FERNBERG/DAILY/AEROCHEM

#16

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REMOVAL DATE	EXPOSURE DATE	CALCIUM MG/L	CHLORIDE MG/L	MAGNESIM MG/L	POTASSIM MG/L	SODIUM MG/L	AMMONIUM AS N MG/L	FREE H+ LAB MG/L
OCT 18,88	OCT 17,88	<W 0.02	<T 0.04	<W 0.005	<T 0.010	<T 0.015	<T 0.010	0.0011
OCT 19,88	OCT 18,88	<T 0.02	<T 0.05	<T 0.005	<T 0.015	<T 0.015	0.320	D 0.0021
OCT 21,88	OCT 20,88	<T 0.08	0.06	<T 0.015	<T 0.020	<T 0.020	0.136	0.0087
OCT 22,88	OCT 21,88	0.12	0.14	<T 0.015	0.100	0.080	0.596	0.0003
OCT 24,88	OCT 23,88	<T 0.10	0.08	<T 0.025	0.025	0.050	0.086	0.0025
OCT 25,88	OCT 24,88	*****	*****	*****	*****	*****	*****	*****
OCT 26,88	OCT 25,88	*****	*****	*****	*****	*****	*****	*****
OCT 27,88	OCT 26,88	0.42	0.07	0.035	0.075	0.060	0.200	0.0012
OCT 28,88	OCT 27,88	0.20	<T 0.04	<T 0.025	0.030	<T 0.020	0.190	0.0004
OCT 29,88	OCT 28,88	*****	*****	*****	*****	*****	*****	*****
OCT 30,88	OCT 29,88	*****	*****	*****	*****	*****	*****	*****
OCT 31,88	OCT 30,88	0.50	0.10	0.055	0.055	0.040	0.296	0.0015
NOV 1,88	OCT 31,88	0.24	0.06	<T 0.020	<T 0.015	<T 0.015	0.160	0.0006
NOV 6,88	NOV 5,88	*****	*****	*****	*****	*****	*****	*****
NOV 8,88	NOV 7,88	<T 0.08	0.12	<T 0.010	<T 0.010	0.040	<T 0.016	0.0076
NOV 9,88	NOV 8,88	0.10	0.28	<T 0.015	0.155	0.185	0.410	0.0040
NOV 10,88	NOV 9,88	D 0.40	0.16	<T 0.025	0.040	0.025	0.360	B 0.0008
NOV 12,88	NOV 11,88	0.10	0.16	<T 0.015	0.030	<T 0.020	0.180	UG 0.0003
NOV 13,88	NOV 12,88	<T 0.06	0.12	<T 0.010	<T 0.015	<T 0.020	0.176	0.0331
NOV 16,88	NOV 15,88	<T 0.04	<T 0.05	<T 0.005	<T 0.010	<T 0.015	0.076	0.0200
NOV 17,88	NOV 16,88	<T 0.04	<T 0.03	<W 0.005	<T 0.010	<T 0.020	<T 0.010	0.0039
NOV 19,88	NOV 18,88	0.16	0.16	<T 0.020	0.035	0.060	0.056	0.0309
NOV 20,88	NOV 19,88	<T 0.02	0.11	<T 0.010	<T 0.015	<T 0.025	0.056	0.0186
DEC 1,88	NOV 25,88	<T 0.04	<W 0.01	<W 0.005	<T 0.005	<T 0.010	0.018	0.0059
DEC 7,88	DEC 6,88	*****	*****	*****	*****	*****	*****	*****
DEC 8,88	DEC 7,88	*****	*****	*****	*****	*****	*****	*****
DEC 9,88	DEC 8,88	*****	*****	*****	*****	*****	*****	*****
DEC 12,88	DEC 11,88	D 0.60	0.19	D 0.115	0.060	0.140	0.072	!IS *****
DEC 13,88	DEC 12,88	0.16	<T 0.04	<T 0.020	0.025	0.030	0.224	0.0066
DEC 14,88	DEC 13,88	<T 0.06	0.05	<T 0.005	<T 0.005	0.030	0.020	0.0059
DEC 16,88	DEC 15,88	<T 0.10	0.12	<T 0.015	0.050	0.080	0.020	!IS *****
DEC 17,88	DEC 16,88	<T 0.08	0.10	<T 0.015	0.035	0.060	0.072	!IS *****
DEC 18,88	DEC 17,88	<T 0.06	<T 0.05	<T 0.010	<T 0.010	0.030	0.020	0.0047
DEC 19,88	DEC 18,88	0.26	0.08	0.045	0.045	0.075	0.168	UG 0.0005
DEC 20,88	DEC 19,88	0.18	0.08	<T 0.020	0.045	0.060	0.102	!IS *****
DEC 21,88	DEC 20,88	0.22	0.15	0.030	0.040	0.090	0.380	!IS *****
DEC 30,88	DEC 21,88	0.20	0.07	<T 0.020	0.035	0.045	0.178	0.0275
DEC 31,88	DEC 30,88	0.30	0.11	0.030	0.030	0.070	<T 0.008	!IS *****

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : QUETICO CENTRE/DAILY/AEROCHEM #14

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REMOVAL DATE	EXPOSURE DATE	SAMPLING START/END HR. HR.		PRECIP START/END HR. HR.		SAMPLE TYPE 01-RAIN 02-SNOW 03-COMP/04-OTHER	GAUGE DEPTH(MM)	GAUGE TYPE 01-STD. 02-NIPHER	SAMPLE NUMBER	PROJECT CODE 02-APIOS 03-SPECIAL	SUBPROJECT CODE 01-MOE 03-AES	SAMPLER EFFICI- ENCY (%)	COMMENTS FIELD OFFICE	
JAN 8,88	JAN 7,88	900	900	****	****	2	0.1	2	31814	2	1	****	EK	
JAN 12,88	JAN 11,88	900	900	****	****	2	4.8	2	31815	2	1	39		XN
JAN 15,88	JAN 14,88	900	900	****	****	2	2.0	2	31816	2	1	U 24	EG	
JAN 19,88	JAN 18,88	900	900	****	****	2	1.4	2	31817	2	1	90		X
JAN 23,88	JAN 22,88	900	900	****	****	2	2.4	2	31818	2	1	48		N
JAN 26,88	JAN 25,88	900	1400	****	****	2	2.4	2	31819	2	1	U 46	G	
FEB 1,88	JAN 31,88	900	900	****	****	2	7.6	2	31820	2	1	80		
FEB 9,88	FEB 8,88	900	900	****	****	2	0.1	2	31821	2	1	****	EK	
FEB 15,88	FEB 14,88	900	900	****	****	2	3.4	2	31822	2	1	42		N
FEB 18,88	FEB 17,88	900	900	****	****	2	2.2	2	31823	2	1	U 51	G	X
FEB 22,88	FEB 21,88	900	900	****	****	2	6.0	2	31824	2	1	U 59	G	X
MAR 2,88	MAR 1,88	900	900	****	****	2	3.6	2	31825	2	1	77		HCM
MAR 8,88	MAR 7,88	900	900	****	****	2	8.6	2	31826	2	1	87		
MAR 9,88	MAR 8,88	900	900	****	****	2	22.0	2	31827	2	1	48		NHM
MAR 15,88	MAR 14,88	900	900	****	****	2	9.2	2	31828	2	1	30		N
MAR 23,88	MAR 22,88	900	900	****	****	2	5.6	2	31829	2	1	95	Q	
MAR 25,88	MAR 24,88	900	900	****	****	3	12.2	2	31830	2	1	98	Q	
MAR 27,88	MAR 26,88	900	900	****	****	3	8.0	2	31831	2	1	46	Q	NM
MAR 29,88	MAR 28,88	900	900	****	****	3	11.4	2	31832	2	1	96	Q	
APR 4,88	APR 3,88	900	900	****	****	1	****	2	31833	2	1	****	QG	
MAY 9,88	MAY 8,88	1100	1100	****	****	1	25.0	1	31834	2	1	136	Q	N
MAY 10,88	MAY 9,88	1100	900	****	****	1	10.0	1	31837	2	1	93	Q	
MAY 13,88	MAY 12,88	900	900	****	****	1	15.8	1	31838	2	1	90		
MAY 15,88	MAY 14,88	900	900	****	****	1	4.0	1	31839	2	1	****	EK	
MAY 22,88	MAY 21,88	900	900	****	****	1	3.0	1	31840	2	1	80	Q	H
JUN 2,88	JUN 1,88	900	900	****	****	1	3.0	1	31842	2	1	96	Q	
JUN 8,88	JUN 7,88	900	900	****	****	1	14.4	1	31843	2	1	99	Q	C
JUN 13,88	JUN 12,88	900	900	****	****	1	8.6	1	31844	2	1	96	Q	H
JUN 14,88	JUN 13,88	900	900	****	****	1	19.0	1	31845	2	1	102	Q	
JUN 16,88	JUN 15,88	900	900	****	****	1	5.8	1	31846	2	1	U 32	GG	
JUN 19,88	JUN 18,88	900	900	****	****	1	3.0	1	31847	2	1	84	Q	H
JUN 22,88	JUN 21,88	900	900	****	****	1	2.0	1	31848	2	1	88	Q	H
JUN 24,88	JUN 23,88	900	900	****	****	1	5.0	1	31849	2	1	98	Q	H
JUN 26,88	JUN 25,88	900	900	****	****	1	6.6	1	31850	2	1	86		HM
JUN 28,88	JUN 27,88	900	900	****	****	1	9.4	1	31851	2	1	93	Q	
JUL 5,88	JUL 4,88	900	900	****	****	1	23.0	1	31852	2	1	88		
JUL 8,88	JUL 7,88	900	900	1500	1530	1	12.4	1	31853	2	1	99	Q	
JUL 11,88	JUL 10,88	900	900	****	****	1	1.4	1	31854	2	1	34	Q	N
JUL 13,88	JUL 12,88	900	900	****	****	1	16.2	1	31855	2	1	U 101	QG	HM
JUL 15,88	JUL 14,88	900	900	****	****	1	12.8	1	31856	2	1	99	Q	

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : QUETICO CENTRE/DAILY/AEROCHEM #14

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REMOVAL DATE	EXPOSURE DATE	VOLUME ML	CONDUCT. UMHO/CM	PH FIELD	PH LAB	TOTAL H+ TO pH8.3 MG/L	TOTAL H+ GRAN MG/L	SULPHATE MG/L	NITRATE AS N MG/L
JAN 8,88	JAN 7,88	*****	*****	*****	*****	*****	*****	*****	*****
JAN 12,88	JAN 11,88	123.0	*****	*****	*****	*****	*****	*****	*****
JAN 15,88	JAN 14,88	31.0	*****	*****	*****	*****	*****	*****	*****
JAN 19,88	JAN 18,88	81.0	*****	*****	*****	*****	*****	*****	*****
JAN 23,88	JAN 22,88	75.0	!IS *****	*****	!IS *****	*****	*****	*****	*****
JAN 26,88	JAN 25,88	71.0	!IS *****	*****	!IR *****	*****	!IS *****	!IS *****	*****
FEB 1,88	JAN 31,88	394.0	15.0	*****	4.52	*****	0.0519	0.75	0.42
FEB 9,88	FEB 8,88	*****	*****	*****	*****	*****	*****	*****	*****
FEB 15,88	FEB 14,88	92.0	27.0	*****	4.47	*****	0.0710	1.90	0.76
FEB 18,88	FEB 17,88	73.0	*****	*****	*****	*****	*****	*****	*****
FEB 22,88	FEB 21,88	229.0	*****	*****	*****	*****	*****	*****	*****
MAR 2,88	MAR 1,88	178.0	14.5	*****	UG 6.60	*****	0.0202	1.75	0.49
MAR 8,88	MAR 7,88	480.0	8.0	*****	D 5.63	*****	0.0215	0.85	0.31
MAR 9,88	MAR 8,88	687.0	6.0	*****	5.00	*****	0.0295	0.40	LG 0.07
MAR 15,88	MAR 14,88	180.0	11.0	*****	5.08	*****	0.0297	1.00	0.36
MAR 23,88	MAR 22,88	342.0	UG 62.0	*****	4.17	*****	0.1080	5.50	UG 2.21
MAR 25,88	MAR 24,88	773.0	12.5	*****	4.84	*****	0.0345	1.45	0.26
MAR 27,88	MAR 26,88	240.0	13.5	*****	UG 7.24	*****	0.0154	2.10	0.35
MAR 29,88	MAR 28,88	708.0	11.5	*****	UG 6.12	*****	0.0166	2.10	0.36
APR 4,88	APR 3,88	406.0	22.0	*****	4.40	*****	0.0642	2.45	0.24
MAY 9,88	MAY 8,88	2182.0	8.5	*****	5.00	*****	0.0331	0.90	0.17
MAY 10,88	MAY 9,88	600.0	5.5	*****	5.22	*****	0.0229	0.50	0.14
MAY 13,88	MAY 12,88	916.0	5.0	*****	5.23	*****	0.0243	0.50	0.12
MAY 15,88	MAY 14,88	*****	*****	*****	*****	*****	*****	*****	*****
MAY 22,88	MAY 21,88	154.0	UG 57.0	*****	4.48	*****	UG 0.0659	UG 8.55	UG 2.01
JUN 2,88	JUN 1,88	185.0	UG 32.0	*****	4.40	*****	UG 0.0712	3.70	0.72
JUN 8,88	JUN 7,88	914.0	D 6.5	*****	5.26	*****	0.0239	D 0.60	0.11
JUN 13,88	JUN 12,88	531.0	24.0	*****	5.15	*****	0.0298	3.85	0.74
JUN 14,88	JUN 13,88	1243.0	14.5	*****	4.86	*****	D 0.0382	1.95	0.35
JUN 16,88	JUN 15,88	121.0	6.0	*****	5.09	*****	0.0236	0.55	0.12
JUN 19,88	JUN 18,88	163.0	21.0	*****	D 6.27	*****	0.0210	2.30	0.98
JUN 22,88	JUN 21,88	113.0	10.5	*****	5.64	*****	0.0204	1.20	0.45
JUN 24,88	JUN 23,88	316.0	11.0	*****	5.86	*****	0.0198	1.35	0.44
JUN 26,88	JUN 25,88	367.0	10.0	*****	6.20	*****	0.0154	2.00	0.24
JUN 28,88	JUN 27,88	563.0	9.5	*****	4.80	*****	0.0336	0.95	0.24
JUL 5,88	JUL 4,88	1307.0	7.0	*****	5.87	*****	0.0191	0.90	0.18
JUL 8,88	JUL 7,88	792.0	11.0	*****	4.83	*****	0.0330	1.20	0.19
JUL 11,88	JUL 10,88	31.0	16.0	*****	6.26	*****	0.0194	1.80	0.59
JUL 13,88	JUL 12,88	1051.0	6.0	*****	5.07	*****	0.0314	0.80	0.23
JUL 15,88	JUL 14,88	817.0	6.0	*****	6.52	*****	0.0200	0.80	0.29

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : QUETICO CENTRE/DAILY/AEROCHEM #14

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REMOVAL DATE	EXPOSURE DATE	CALCIUM MG/L	CHLORIDE MG/L	MAGNESIUM MG/L	POTASSIUM MG/L	SODIUM MG/L	AMMONIUM AS N MG/L	FREE H+ LAB MG/L
JAN 8,88	JAN 7,88	*****	*****	*****	*****	*****	*****	*****
JAN 12,88	JAN 11,88	*****	*****	*****	*****	*****	*****	*****
JAN 15,88	JAN 14,88	*****	*****	*****	*****	*****	*****	*****
JAN 19,88	JAN 18,88	*****	*****	*****	*****	*****	*****	*****
JAN 23,88	JAN 22,88	!IS *****	!IS *****	!IS *****	!IS *****	!IS *****	!IS *****	!IS *****
JAN 26,88	JAN 25,88	!IS *****	!IS *****	!IS *****	!IS *****	!IS *****	!IS *****	!IS *****
FEB 1,88	JAN 31,88	<T 0.06	0.07	<T 0.010	<T 0.010	<T 0.025	0.070	0.0302
FEB 9,88	FEB 8,88	*****	*****	*****	*****	*****	*****	*****
FEB 15,88	FEB 14,88	0.22	0.22	0.040	0.025	0.150	0.410	0.0339
FEB 18,88	FEB 17,88	*****	*****	*****	*****	*****	*****	*****
FEB 22,88	FEB 21,88	*****	*****	*****	*****	*****	*****	*****
MAR 2,88	MAR 1,88	0.28	0.22	0.045	0.045	0.190	0.470	UG 0.0003
MAR 8,88	MAR 7,88	0.22	0.08	<T 0.025	D 0.035	D 0.120	0.300	D 0.0023
MAR 9,88	MAR 8,88	<T 0.08	<T 0.02	<T 0.005	<W 0.005	<T 0.005	0.060	0.0100
MAR 15,88	MAR 14,88	0.22	0.07	0.025	0.030	0.055	0.340	0.0083
MAR 23,88	MAR 22,88	UG 1.18	0.33	0.125	0.120	0.220	1.690	0.0676
MAR 25,88	MAR 24,88	0.16	D 0.08	<T 0.015	0.040	D 0.130	D 0.232	0.0145
MAR 27,88	MAR 26,88	0.90	0.09	0.085	0.170	0.125	0.714	UG 0.0001
MAR 29,88	MAR 28,88	0.60	0.13	0.050	0.110	0.150	0.470	UG 0.0008
APR 4,88	APR 3,88	0.22	0.06	<T 0.020	0.030	0.030	0.122	0.0398
MAY 9,88	MAY 8,88	0.16	<T 0.02	0.025	<T 0.025	<T 0.015	0.094	0.0100
MAY 10,88	MAY 9,88	0.10	<T 0.02	<T 0.020	<T 0.025	<W 0.005	0.098	0.0060
MAY 13,88	MAY 12,88	<T 0.08	<T 0.04	<T 0.015	0.030	<T 0.020	0.140	0.0059
MAY 15,88	MAY 14,88	*****	*****	*****	*****	*****	*****	*****
MAY 22,88	MAY 21,88	3.02	0.37	0.390	0.135	0.210	1.670	0.0331
JUN 2,88	JUN 1,88	0.62	0.30	0.125	UG 0.325	0.210	0.696	0.0398
JUN 8,88	JUN 7,88	<T 0.08	0.10	D 0.025	0.035	<T 0.010	D 0.164	0.0055
JUN 13,88	JUN 12,88	0.80	0.15	0.125	0.155	0.050	1.170	0.0071
JUN 14,88	JUN 13,88	0.30	0.06	0.030	0.055	<T 0.015	0.528	0.0138
JUN 16,88	JUN 15,88	0.10	<T 0.04	<T 0.015	0.040	<T 0.015	0.072	0.0081
JUN 19,88	JUN 18,88	0.86	0.25	0.145	0.110	D 0.165	1.100	D 0.0005
JUN 22,88	JUN 21,88	0.50	0.11	0.090	0.065	0.065	0.420	0.0023
JUN 24,88	JUN 23,88	0.46	D 0.12	0.075	D 0.050	0.045	0.536	0.0014
JUN 26,88	JUN 25,88	0.46	0.06	0.125	0.050	UG 0.665	0.258	0.0006
JUN 28,88	JUN 27,88	0.14	0.06	<T 0.020	<T 0.025	0.025	0.234	0.0158
JUL 5,88	JUL 4,88	0.12	<T 0.05	0.025	<T 0.015	<T 0.005	0.390	0.0013
JUL 8,88	JUL 7,88	0.12	0.07	<T 0.015	0.030	<T 0.015	0.294	0.0148
JUL 11,88	JUL 10,88	!IS *****	0.31	!IS *****	!IS *****	!IS *****	0.774	0.0005
JUL 13,88	JUL 12,88	<W 0.02	0.19	<T 0.005	<T 0.005	<T 0.005	0.270	0.0085
JUL 15,88	JUL 14,88	0.14	0.06	0.030	0.030	<T 0.020	0.506	0.0003

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : QUETICO CENTRE/DAILY/AEROCHEM #14

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REMOVAL DATE	EXPOSURE DATE	SAMPLING START/END HR. HR.	PRECIP START/END HR. HR.	SAMPLE TYPE 01-RAIN 02-SNOW 03-COMP/04-OTHER	GAUGE DEPTH(MM)	GAUGE TYPE 01-STD. 02-NIPHER	SAMPLE NUMBER	PROJECT CODE 02-APIOS 03-SPECIAL	SUBPROJECT CODE 01-MOE 03-AES	SAMPLER EFFICI- ENCY (%)	COMMENTS FIELD OFFICE	
JUL 21,88	JUL 20,88	900 900	****	****	1	15.0	1	31857	2	1	98	Q C
JUL 29,88	JUL 28,88	900 900	****	****	1	12.2	1	31859	2	1	94	Q
JUL 30,88	JUL 29,88	900 900	****	****	1	4.0	1	31860	2	1	83	CQ H
AUG 1,88	JUL 31,88	900 900	****	****	1	6.6	1	31861	2	1	86	HM
AUG 2,88	AUG 1,88	900 900	****	****	1	24.6	1	31862	2	1	103	C
AUG 3,88	AUG 2,88	900 900	****	****	1	7.6	1	31865	2	1	95	Q
AUG 4,88	AUG 3,88	900 900	****	****	1	3.4	1	31866	2	1	87	Q
AUG 5,88	AUG 4,88	900 900	****	****	1	42.4	1	31867	2	1	102	C
AUG 7,88	AUG 6,88	900 900	****	****	1	7.1	1	31868	2	1	84	H
AUG 8,88	AUG 7,88	900 900	****	****	1	12.6	1	31869	2	1	98	
AUG 14,88	AUG 13,88	900 900	****	****	1	****	1	31870	2	1	101	CD
AUG 17,88	AUG 16,88	900 900	****	****	1	****	1	31871	2	1	****	P
AUG 22,88	AUG 21,88	900 900	****	****	1	18.8	1	31872	2	1	96	D
AUG 23,88	AUG 22,88	900 900	****	****	1	35.0	1	31873	2	1	96	D
AUG 24,88	AUG 23,88	900 900	****	****	1	3.8	1	31874	2	1	72	
AUG 29,88	AUG 28,88	900 900	****	****	1	11.6	1	31875	2	1	91	
SEP 1,88	AUG 31,88	900 900	****	****	1	34.0	1	31876	2	1	101	N
SEP 2,88	SEP 1,88	900 900	****	****	1	5.2	1	31877	2	1	86	H
SEP 12,88	SEP 11,88	900 900	****	****	1	6.0	1	31878	2	1	66	G H
SEP 16,88	SEP 15,88	900 900	****	****	1	2.4	1	31879	2	1	65	
SEP 19,88	SEP 18,88	900 900	****	****	1	11.2	1	31880	2	1	92	H
SEP 20,88	SEP 19,88	900 900	****	****	1	0.1	1	31881	2	1	****	EK
SEP 22,88	SEP 21,88	900 900	****	****	1	3.0	1	31882	2	1	68	HCM
SEP 25,88	SEP 24,88	900 900	****	****	1	6.0	1	31883	2	1	89	H
SEP 26,88	SEP 25,88	900 900	****	****	1	0.1	1	31884	2	1	****	EK
SEP 29,88	SEP 28,88	900 900	****	****	1	5.5	1	31885	2	1	87	
OCT 3,88	OCT 2,88	900 900	****	****	1	4.8	1	31886	2	1	6	G
OCT 17,88	OCT 16,88	900 900	****	****	1	9.0	2	31887	2	1	110	HCM
OCT 19,88	OCT 18,88	900 900	****	****	1	0.1	2	31888	2	1	****	EK
OCT 21,88	OCT 20,88	900 900	****	****	1	4.2	1	31889	2	1	90	C
OCT 24,88	OCT 23,88	900 900	****	****	3	19.2	2	31890	2	1	91	NH
OCT 25,88	OCT 24,88	900 900	****	****	3	3.8	2	31891	2	1	****	EK
OCT 28,88	OCT 27,88	900 900	****	****	2	12.8	2	31892	2	1	65	NHM
OCT 31,88	OCT 30,88	900 900	****	****	2	0.1	2	31893	2	1	****	EK
NOV 1,88	OCT 31,88	900 900	****	****	2	4.2	2	31894	2	1	54	HM
NOV 7,88	NOV 6,88	900 900	****	****	2	8.4	2	31895	2	1	13	NHCM
NOV 10,88	NOV 9,88	900 900	****	****	1	5.8	2	31896	2	1	96	C
NOV 13,88	NOV 12,88	900 900	****	****	3	6.7	2	31897	2	1	102	
NOV 16,88	NOV 15,88	900 900	****	****	3	24.6	2	31898	2	1	83	N
NOV 17,88	NOV 16,88	900 900	****	****	2	16.0	2	31899	2	1	22	NC

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : QUETICO CENTRE/DAILY/AEROCHEM #14

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REMOVAL DATE	EXPOSURE DATE	VOLUME ML	CONDUCT. UMHO/CM	PH FIELD	PH LAB	TOTAL H+ TO PH8.3 MG/L	TOTAL H+ GRAN MG/L	SULPHATE MG/L	NITRATE AS N MG/L
JUL 21,88	JUL 20,88	946.0	2.5	*****	5.17	*****	0.0282	0.35	0.06
JUL 29,88	JUL 28,88	740.0	8.0	*****	6.62	*****	0.0196	1.30	0.35
JUL 30,88	JUL 29,88	214.0	5.0	*****	5.74	*****	0.0235	1.00	0.19
AUG 1,88	JUL 31,88	364.0	6.0	*****	5.69	*****	0.0325	0.70	0.25
AUG 2,88	AUG 1,88	1629.0	2.0	*****	5.47	*****	0.0215	0.30	0.12
AUG 3,88	AUG 2,88	464.0	5.0	*****	5.15	*****	0.0295	0.70	0.12
AUG 4,88	AUG 3,88	190.0	7.5	*****	5.94	*****	0.0246	0.80	0.43
AUG 5,88	AUG 4,88	2777.0	1.0	*****	5.45	*****	0.0217	<T	0.10
AUG 7,88	AUG 6,88	386.0	8.0	*****	5.18	*****	0.0300	0.95	0.34
AUG 8,88	AUG 7,88	794.0	5.5	*****	5.35	*****	0.0303	0.70	0.23
AUG 14,88	AUG 13,88	9104.0	1.0	*****	5.70	*****	0.0205	<T	0.10
AUG 17,88	AUG 16,88	642.0	10.5	*****	5.29	*****	0.0309	1.35	0.50
AUG 22,88	AUG 21,88	1163.0	16.0	*****	4.57	*****	0.0552	2.65	0.30
AUG 23,88	AUG 22,88	2165.0	2.5	*****	5.22	*****	0.0249	D	0.40
AUG 24,88	AUG 23,88	176.0	3.0	*****	5.76	*****	0.0212	0.60	<T
AUG 29,88	AUG 28,88	682.0	5.0	*****	5.27	*****	0.0263	0.80	0.06
SEP 1,88	AUG 31,88	2208.0	6.5	*****	6.47	*****	0.0182	1.25	0.24
SEP 2,88	SEP 1,88	287.0	6.5	*****	6.11	*****	0.0248	1.15	0.28
SEP 12,88	SEP 11,88	254.0	39.0	*****	UG	6.90	0.0360	UG	7.60
SEP 16,88	SEP 15,88	101.0	15.0	*****	6.37	*****	0.0207	3.40	0.50
SEP 19,88	SEP 18,88	661.0	14.0	*****	4.78	*****	0.0467	1.75	0.34
SEP 20,88	SEP 19,88	*****	*****	*****	*****	*****	*****	*****	*****
SEP 22,88	SEP 21,88	132.0	16.1	*****	LG	4.06	UG	0.1230	2.20
SEP 25,88	SEP 24,88	345.0	9.0	*****	6.23	*****	0.0227	1.55	0.41
SEP 26,88	SEP 25,88	*****	*****	*****	*****	*****	*****	*****	*****
SEP 29,88	SEP 28,88	307.0	15.5	*****	4.49	*****	0.0550	2.00	0.19
OCT 3,88	OCT 2,88	20.0	!IS	*****	5.51	*****	0.0204	!IS	*****
OCT 17,88	OCT 16,88	635.0	4.0	*****	4.96	*****	0.0274	0.85	<T
OCT 19,88	OCT 18,88	*****	*****	*****	*****	*****	*****	*****	*****
OCT 21,88	OCT 20,88	245.0	8.0	*****	4.75	*****	0.0353	0.90	0.30
OCT 24,88	OCT 23,88	1121.0	5.0	*****	5.25	*****	0.0208	0.50	0.20
OCT 25,88	OCT 24,88	*****	*****	*****	*****	*****	*****	*****	*****
OCT 28,88	OCT 27,88	537.0	6.0	*****	6.25	*****	0.0164	0.50	0.20
OCT 31,88	OCT 30,88	*****	*****	*****	*****	*****	*****	*****	*****
NOV 1,88	OCT 31,88	146.0	7.0	*****	6.29	*****	0.0162	1.10	0.24
NOV 7,88	NOV 6,88	75.0	2.0	*****	5.32	*****	0.0196	0.25	LG
NOV 10,88	NOV 9,88	360.0	6.0	*****	4.82	*****	0.0332	0.70	0.21
NOV 13,88	NOV 12,88	439.0	8.5	*****	4.63	*****	0.0387	0.55	0.28
NOV 16,88	NOV 15,88	1310.0	11.0	*****	4.55	*****	0.0464	1.10	0.20
NOV 17,88	NOV 16,88	228.0	3.5	*****	5.00	*****	0.0255	0.30	0.12

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : QUETICO CENTRE/DAILY/AEROCHEM #14

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REMOVAL DATE	EXPOSURE DATE	CALCIUM MG/L	CHLORIDE MG/L	MAGNESIUM MG/L	POTASSIUM MG/L	SODIUM MG/L	AMMONIUM AS N MG/L	FREE H+ LAB MG/L
JUL 21,88	JUL 20,88	<T 0.06	<T 0.03	<T 0.010	<T 0.010	<T 0.020	0.040	0.0068
JUL 29,88	JUL 28,88	0.40	0.05	0.070	0.065	0.030	D 0.530	0.0002
JUL 30,88	JUL 29,88	0.18	0.21	0.035	0.070	0.060	0.296	0.0018
AUG 1,88	JUL 31,88	0.14	0.55	<T 0.020	<T 0.015	<T 0.010	0.330	0.0020
AUG 2,88	AUG 1,88	<T 0.06	<T 0.04	<T 0.005	<T 0.015	<T 0.025	0.100	0.0034
AUG 3,88	AUG 2,88	<T 0.06	<W 0.01	<T 0.005	<T 0.015	<T 0.010	0.170	0.0071
AUG 4,88	AUG 3,88	0.18	0.09	0.040	0.070	D 0.040	D 0.540	0.0011
AUG 5,88	AUG 4,88	<W 0.02	<W 0.01	<W 0.005	<T 0.010	<T 0.010	0.050	0.0035
AUG 7,88	AUG 6,88	0.16	0.16	<T 0.020	<T 0.020	<T 0.020	0.330	0.0066
AUG 8,88	AUG 7,88	<T 0.10	0.09	<T 0.005	0.045	0.040	0.276	0.0045
AUG 14,88	AUG 13,88	<W 0.02	<W 0.01	<W 0.005	<W 0.005	<W 0.005	0.046	0.0020
AUG 17,88	AUG 16,88	D 0.24	D 0.24	0.030	D 0.095	0.155	0.576	0.0051
AUG 22,88	AUG 21,88	0.14	0.06	0.030	0.040	<T 0.020	0.586	0.0269
AUG 23,88	AUG 22,88	<W 0.02	<W 0.01	<W 0.005	<T 0.010	<T 0.005	0.076	0.0060
AUG 24,88	AUG 23,88	<T 0.10	<W 0.01	<T 0.020	0.025	0.035	0.120	0.0017
AUG 29,88	AUG 28,88	<T 0.06	<W 0.01	<T 0.020	<T 0.020	0.030	0.120	0.0054
SEP 1,88	AUG 31,88	0.22	<W 0.01	0.040	0.045	<T 0.020	0.536	0.0003
SEP 2,88	SEP 1,88	0.30	<W 0.01	0.070	0.070	0.120	0.406	0.0008
SEP 12,88	SEP 11,88	2.76	0.35	0.495	UG 0.325	UG 0.690	1.570	UG 0.0001
SEP 16,88	SEP 15,88	0.76	0.17	0.155	0.085	0.180	0.876	0.0004
SEP 19,88	SEP 18,88	0.10	<T 0.04	0.025	0.025	<T 0.025	0.350	0.0166
SEP 20,88	SEP 19,88	*****	*****	*****	*****	*****	*****	*****
SEP 22,88	SEP 21,88	0.34	0.11	0.030	0.055	0.055	0.634	LG 0.0871
SEP 25,88	SEP 24,88	0.42	0.06	0.085	0.080	0.050	0.656	0.0006
SEP 26,88	SEP 25,88	*****	*****	*****	*****	*****	*****	*****
SEP 29,88	SEP 28,88	<T 0.06	0.07	<T 0.010	0.040	0.030	D 0.242	0.0324
OCT 3,88	OCT 2,88	0.12	!IS *****	0.030	0.030	<T 0.020	0.060	0.0031
OCT 17,88	OCT 16,88	<T 0.08	<T 0.05	<T 0.010	0.025	0.060	0.126	0.0110
OCT 19,88	OCT 18,88	*****	*****	*****	*****	*****	*****	*****
OCT 21,88	OCT 20,88	<T 0.08	<T 0.05	<T 0.015	<T 0.015	0.025	0.280	0.0178
OCT 24,88	OCT 23,88	<T 0.06	<W 0.01	<T 0.010	0.060	<T 0.025	D 0.250	0.0056
OCT 25,88	OCT 24,88	*****	*****	*****	*****	*****	*****	*****
OCT 28,88	OCT 27,88	0.50	<T 0.05	0.025	0.035	<T 0.020	0.340	0.0006
OCT 31,88	OCT 30,88	*****	*****	*****	*****	*****	*****	*****
NOV 1,88	OCT 31,88	0.72	0.07	0.060	0.035	0.035	0.356	0.0005
NOV 7,88	NOV 6,88	0.10	0.06	<T 0.020	<T 0.020	0.050	0.036	0.0048
NOV 10,88	NOV 9,88	<T 0.02	<T 0.04	<T 0.005	<T 0.005	0.025	0.180	0.0151
NOV 13,88	NOV 12,88	<T 0.04	0.10	<W 0.005	<W 0.005	<T 0.010	0.106	0.0234
NOV 16,88	NOV 15,88	<T 0.04	<T 0.05	<W 0.005	<T 0.010	<T 0.020	0.110	0.0282
NOV 17,88	NOV 16,88	<T 0.02	<T 0.04	<W 0.005	<T 0.010	<T 0.010	0.026	0.0100

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : QUETICO CENTRE/DAILY/AEROCHEM #14

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REMOVAL DATE	EXPOSURE DATE	SAMPLING START/END HR. HR.	PRECIP START/END HR. HR.	SAMPLE TYPE 01-RAIN 02-SNOW 03-COMP/04-OTHER	GAUGE DEPTH(MM)	GAUGE TYPE 01-STD. 02-NIPHER	SAMPLE NUMBER	PROJECT CODE 02-APIOS 03-SPECIAL	SUBPROJECT CODE 01-MOE 03-AES	SAMPLER EFFICI- ENCY (%)	COMMENTS FIELD OFFICE
NOV 20,88	NOV 19,88	900 900	**** ****	2	8.1	2	31900	2	1	79	
NOV 27,88	NOV 26,88	900 900	**** ****	2	10.4	2	86001	2	1	29	
DEC 13,88	DEC 11,88	900 900	**** ****	2	6.3	2	86002	2	1	8	Q
DEC 19,88	DEC 18,88	900 900	**** ****	2	4.4	2	86003	2	1	20	
DEC 23,88	DEC 21,88	900 900	**** ****	2	7.7	2	86004	2	1	59	Q
DEC 28,88	DEC 27,88	900 900	**** ****	2	9.6	2	86005	2	1	58	

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : QUETICO CENTRE/DAILY/AEROCHEM #14

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REMOVAL DATE	EXPOSURE DATE	VOLUME ML	CONDUCT. UMHO/CM	PH FIELD	PH LAB	TOTAL H+ TO PH8.3 MG/L	TOTAL H+ GRAN MG/L	SULPHATE MG/L	NITRATE AS N MG/L
NOV 20,88	NOV 19,88	411.0	23.0	*****	4.21	*****	0.0749	0.50	0.88
NOV 27,88	NOV 26,88	195.0	7.0	*****	4.77	*****	0.0315	0.50	0.20
DEC 13,88	DEC 11,88	34.0	!IS *****	*****	!IS *****	*****	!IS *****	!IS *****	!IS *****
DEC 19,88	DEC 18,88	57.0	16.0	*****	4.69	*****	0.0444	1.15	0.49
DEC 23,88	DEC 21,88	293.0	24.0	*****	4.34	*****	0.0692	0.85	0.73
DEC 28,88	DEC 27,88	358.0	7.0	*****	4.86	*****	0.0305	0.30	0.23

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : QUETICO CENTRE/DAILY/AEROCHEM #14

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REMOVAL DATE	EXPOSURE DATE	CALCIUM MG/L	CHLORIDE MG/L	MAGNESIUM MG/L	POTASSIUM MG/L	SODIUM MG/L	AMMONIUM AS N MG/L	FREE H+ LAB MG/L
NOV 20,88	NOV 19,88	<T 0.08	0.10	<T 0.010	<W 0.005	<T 0.010	0.076	0.0617
NOV 27,88	NOV 26,88	<T 0.02	<T 0.05	<W 0.005	<W 0.005	<W 0.005	0.050	0.0170
DEC 13,88	DEC 11,88	0.42	!IS *****	0.080	0.055	0.210	0.308	!IS *****
DEC 19,88	DEC 18,88	0.14	0.15	0.030	0.030	0.125	0.224	0.0204
DEC 23,88	DEC 21,88	<T 0.06	0.06	<T 0.010	<T 0.015	0.040	0.154	0.0457
DEC 28,88	DEC 27,88	<T 0.02	<T 0.03	<W 0.005	<W 0.005	<T 0.010	0.022	0.0138

PART VI

SOUTHEASTERN REGION

DAILY PRECIPITATION CHEMISTRY LISTINGS

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : CHARLESTON LAKE/DAILY/AEROCHEM #11

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REMOVAL DATE	EXPOSURE DATE	SAMPLING START/END HR. HR.	PRECIP START/END HR. HR.	SAMPLE TYPE 01-RAIN 02-SNOW 03-COMP/04-OTHER	GAUGE DEPTH(MM)	GAUGE TYPE 01-STD. 02-NIPHER	SAMPLE NUMBER	PROJECT CODE 02-APIOS 03-SPECIAL	SUBPROJECT CODE 01-MOE 03-AES	SAMPLER EFFICI- ENCY (%)	COMMENTS FIELD OFFICE
JAN 5,88	JAN 4,88	600 900	700 1800	2	2.0	2	54199	2	1	63	
JAN 9,88	JAN 8,88	800 900	1900 600	2	1.2	2	54200	2	1	49	N
JAN 14,88	JAN 13,88	530 600	600 1300	3	0.6	2	54201	2	1	166	C NC
JAN 18,88	JAN 17,88	600 600	2300 500	1	0.7	2	54202	2	1	216	D N
JAN 19,88	JAN 18,88	600 600	1000 2100	1	3.6	2	54203	2	1	111	
JAN 20,88	JAN 19,88	600 1000	1000 1000	1	5.9	2	54204	2	1	108	
JAN 21,88	JAN 20,88	1000 900	1000 1300	1	2.3	2	54205	2	1	113	
JAN 24,88	JAN 23,88	530 530	530 1000	2	0.6	2	54206	2	1	93	
JAN 25,88	JAN 24,88	530 600	1300 2400	2	8.5	2	54207	2	1	****	EG
JAN 29,88	JAN 28,88	530 600	600 1100	2	0.4	2	54208	2	1	15	E N
JAN 31,88	JAN 30,88	800 900	1900 300	1	1.5	2	54209	2	1	173	C XN
FEB 1,88	JAN 31,88	900 900	2100 500	1	1.5	2	54210	2	1	134	N
FEB 2,88	FEB 1,88	900 900	2400 900	3	11.2	2	54211	2	1	****	GE
MAR 10,88	MAR 9,88	600 900	700 1300	1	4.6	2	54212	2	1	99	C
MAR 13,88	MAR 10,88	900 800	600 800	1	1.6	2	54213	2	1	179	
MAR 14,88	MAR 13,88	800 800	800 1100	3	0.2	2	54214	2	1	****	E NY3
MAR 15,88	MAR 14,88	800 815	1300 1600	2	0.4	2	54215	2	1	62	N
MAR 19,88	MAR 15,88	815 800	1300 1800	2	1.6	2	54216	2	1	52	
MAR 20,88	MAR 19,88	800 800	830 1100	2	1.3	2	54217	2	1	73	Y2
MAR 24,88	MAR 23,88	800 800	1900 500	1	2.4	2	54218	2	1	129	C N
MAR 26,88	MAR 25,88	800 745	2000 200	1	15.4	2	54219	2	1	100	CDE H
MAR 27,88	MAR 26,88	745 730	30 330	1	1.8	2	54220	2	1	139	C N
MAR 28,88	MAR 27,88	730 745	1200 300	2	1.4	2	54221	2	1	51	
APR 4,88	APR 3,88	700 600	800 2100	1	22.0	2	54222	2	1	102	
APR 9,88	APR 8,88	600 800	700 2100	2	6.0	2	54223	2	1	96	M
APR 14,88	APR 13,88	600 600	630 1800	1	1.8	2	54224	2	1	175	N
APR 15,88	APR 14,88	600 545	1500 2300	1	2.5	2	54225	2	1	142	NC
APR 18,88	APR 17,88	700 830	2200 400	1	0.2	2	54226	2	1	468	N
APR 21,88	APR 20,88	800 900	2200 700	2	7.0	1	54227	2	1	120	N
APR 24,88	APR 23,88	700 600	1400 2200	1	1.2	1	54228	2	1	123	C N
APR 25,88	APR 24,88	600 600	800 1600	1	2.4	1	54229	2	1	100	
APR 27,88	APR 26,88	600 600	1400 1600	1	2.5	1	54230	2	1	101	
APR 29,88	APR 28,88	600 600	1300 600	1	20.2	1	54231	2	1	98	
APR 30,88	APR 29,88	600 900	600 900	1	7.2	1	54232	2	1	94	
MAY 14,88	MAY 13,88	600 600	1200 1600	1	4.4	1	54233	2	1	96	CD
MAY 16,88	MAY 15,88	600 600	100 500	1	0.7	1	54234	2	1	75	
MAY 17,88	MAY 16,88	600 600	2000 2300	1	7.2	1	54235	2	1	101	
MAY 19,88	MAY 18,88	600 600	1800 ****	1	4.0	1	54236	2	1	89	
MAY 20,88	MAY 19,88	600 600	900 500	1	17.2	1	54237	2	1	114	
MAY 21,88	MAY 20,88	600 900	800 1300	1	6.3	1	54238	2	1	96	

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : CHARLESTON LAKE/DAILY/AEROCHEM #11

PAGE : 2

REMOVAL DATE	EXPOSURE DATE	VOLUME ML	CONDUCT. UMHO/CM	PH FIELD	PH LAB	TOTAL H+ TO PH8.3 MG/L	TOTAL H+ GRAN MG/L	SULPHATE MG/L	NITRATE AS N MG/L
JAN 5,88	JAN 4,88	82.0	38.0	*****	4.14	*****	0.1120	1.90	1.23
JAN 9,88	JAN 8,88	38.0	31.0	*****	4.21	*****	0.0974	0.70	1.16
JAN 14,88	JAN 13,88	64.0	> 100.0	*****	3.55	*****	0.3800	8.10	3.46
JAN 18,88	JAN 17,88	97.0	74.0	*****	3.81	*****	0.2150	3.90	1.88
JAN 19,88	JAN 18,88	258.0	37.0	*****	4.09	*****	0.1160	2.65	0.72
JAN 20,88	JAN 19,88	409.0	21.5	*****	4.35	*****	0.0727	1.80	0.44
JAN 21,88	JAN 20,88	167.0	60.0	*****	3.92	*****	0.1720	3.65	1.54
JAN 24,88	JAN 23,88	36.0	56.5	*****	3.95	*****	0.1590	2.45	1.72
JAN 25,88	JAN 24,88	*****	*****	*****	*****	*****	*****	*****	*****
JAN 29,88	JAN 28,88	4.0	*****	*****	*****	*****	*****	*****	*****
JAN 31,88	JAN 30,88	167.0	*****	*****	*****	*****	*****	*****	*****
FEB 1,88	JAN 31,88	129.0	73.0	*****	3.83	*****	0.1990	5.35	1.44
FEB 2,88	FEB 1,88	*****	*****	*****	*****	*****	*****	*****	*****
MAR 10,88	MAR 9,88	292.0	32.0	*****	4.61	*****	0.0569	4.60	0.91
MAR 13,88	MAR 10,88	184.0	45.5	*****	4.15	*****	0.1070	3.75	1.18
MAR 14,88	MAR 13,88	*****	*****	*****	*****	*****	*****	*****	*****
MAR 15,88	MAR 14,88	16.0	25.5	*****	4.52	*****	0.0563	2.45	0.48
MAR 19,88	MAR 15,88	54.0	72.0	*****	4.03	*****	0.1410	5.70	2.05
MAR 20,88	MAR 19,88	61.0	19.5	*****	4.63	*****	0.0434	0.45	0.60
MAR 24,88	MAR 23,88	199.0	*****	*****	*****	*****	*****	*****	*****
MAR 26,88	MAR 25,88	992.0	13.0	*****	4.95	*****	0.0328	1.50	0.39
MAR 27,88	MAR 26,88	161.0	38.5	*****	4.24	*****	0.0877	2.20	1.31
MAR 28,88	MAR 27,88	46.0	13.0	*****	5.65	*****	0.0204	2.00	0.44
APR 4,88	APR 3,88	1445.0	29.5	4.25	4.29	*****	0.0778	2.55	0.41
APR 9,88	APR 8,88	371.0	16.0	4.51	4.60	*****	0.0449	1.60	0.24
APR 14,88	APR 13,88	203.0	75.0	3.83	3.87	*****	0.1770	4.65	1.60
APR 15,88	APR 14,88	228.0	> 100.0	3.55	3.58	*****	0.3380	13.00	3.34
APR 18,88	APR 17,88	60.0	48.5	*****	7.32	*****	0.0164	7.05	1.83
APR 21,88	APR 20,88	540.0	20.5	*****	4.59	*****	0.0569	1.35	0.72
APR 24,88	APR 23,88	95.0	54.5	*****	4.10	*****	0.1270	6.00	1.00
APR 25,88	APR 24,88	154.0	28.0	*****	4.33	*****	0.0793	2.70	0.36
APR 27,88	APR 26,88	162.0	36.5	*****	4.59	*****	0.0578	4.55	1.23
APR 29,88	APR 28,88	1275.0	24.0	*****	4.47	*****	0.0658	2.05	0.50
APR 30,88	APR 29,88	436.0	13.5	*****	4.87	*****	0.0400	1.50	0.24
MAY 14,88	MAY 13,88	273.0	44.0	4.37	4.46	*****	0.0663	7.55	1.40
MAY 16,88	MAY 15,88	34.0	!IS *****	*****	!IS *****	*****	!IS *****	10.40	1.79
MAY 17,88	MAY 16,88	469.0	45.5	4.02	4.07	*****	0.1210	5.05	0.70
MAY 19,88	MAY 18,88	229.0	16.5	4.40	4.49	*****	0.0528	1.80	0.35
MAY 20,88	MAY 19,88	1261.0	3.5	5.20	5.49	*****	0.0209	0.60	0.09
MAY 21,88	MAY 20,88	391.0	LG 4.0	4.99	5.13	*****	0.0259	LG 0.36	0.13

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : CHARLESTON LAKE/DAILY/AEROCHEM #11

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REMOVAL DATE	EXPOSURE DATE	CALCIUM MG/L	CHLORIDE MG/L	MAGNESIUM MG/L	POTASSIUM MG/L	SODIUM MG/L	AMMONIUM AS N MG/L	FREE H+ LAB MG/L
JAN 5,88	JAN 4,88	0.54	0.60	0.090	<T 0.020	0.140	0.210	0.0724
JAN 9,88	JAN 8,88	!IS *****	0.42	!IS *****	!IS *****	!IS *****	D 0.250	0.0617
JAN 14,88	JAN 13,88	1.00	1.46	0.135	0.035	UG 0.690	0.590	LG 0.2818
JAN 18,88	JAN 17,88	0.26	0.64	0.035	<T 0.020	0.310	0.330	0.1549
JAN 19,88	JAN 18,88	<T 0.04	0.10	<W 0.005	<T 0.010	<T 0.020	0.230	0.0813
JAN 20,88	JAN 19,88	0.12	0.08	<T 0.005	<T 0.010	0.025	0.130	0.0447
JAN 21,88	JAN 20,88	0.48	0.30	0.045	0.025	0.070	0.390	0.1202
JAN 24,88	JAN 23,88	!IS *****	0.74	!IS *****	!IS *****	!IS *****	0.210	0.1122
JAN 25,88	JAN 24,88	*****	*****	*****	*****	*****	*****	*****
JAN 29,88	JAN 28,88	*****	*****	*****	*****	*****	*****	*****
JAN 31,88	JAN 30,88	*****	*****	*****	*****	*****	*****	*****
FEB 1,88	JAN 31,88	0.16	0.80	0.050	<T 0.020	0.420	0.570	0.1479
FEB 2,88	FEB 1,88	*****	*****	*****	*****	*****	*****	*****
MAR 10,88	MAR 9,88	1.82	0.46	0.285	0.085	0.260	0.180	0.0245
MAR 13,88	MAR 10,88	0.80	0.21	0.135	0.085	0.120	0.330	0.0708
MAR 14,88	MAR 13,88	*****	*****	*****	*****	*****	*****	*****
MAR 15,88	MAR 14,88	0.56	0.58	0.065	0.055	0.365	!IS *****	0.0302
MAR 19,88	MAR 15,88	0.90	1.02	UG 0.650	0.060	0.265	0.940	0.0933
MAR 20,88	MAR 19,88	0.20	0.28	0.085	<W 0.005	0.135	0.030	0.0234
MAR 24,88	MAR 23,88	*****	*****	*****	*****	*****	*****	*****
MAR 26,88	MAR 25,88	0.28	0.11	0.055	0.035	0.065	0.280	0.0112
MAR 27,88	MAR 26,88	0.44	0.11	0.110	0.030	0.050	0.560	0.0575
MAR 28,88	MAR 27,88	0.42	0.16	0.280	<T 0.020	0.085	!IS *****	UG 0.0022
APR 4,88	APR 3,88	<T 0.04	0.16	<T 0.025	<T 0.010	0.050	0.180	0.0513
APR 9,88	APR 8,88	<W 0.02	<T 0.04	<T 0.005	<T 0.015	<T 0.020	0.190	0.0251
APR 14,88	APR 13,88	0.38	0.28	0.050	<T 0.015	0.050	0.450	0.1349
APR 15,88	APR 14,88	1.14	0.77	0.225	0.055	0.285	1.720	LG 0.2630
APR 18,88	APR 17,88	UG 3.52	0.44	UG 0.790	0.150	0.150	1.380	UG 0.0000
APR 21,88	APR 20,88	0.24	0.05	D 0.045	<T 0.015	<T 0.025	0.425	0.0257
APR 24,88	APR 23,88	0.86	0.20	0.145	0.030	0.075	0.675	0.0794
APR 25,88	APR 24,88	0.12	<T 0.03	<T 0.010	<T 0.015	<T 0.015	0.225	0.0468
APR 27,88	APR 26,88	0.90	0.25	0.185	0.035	0.035	1.350	0.0257
APR 29,88	APR 28,88	<T 0.08	0.05	<T 0.015	<T 0.010	<T 0.015	0.425	0.0339
APR 30,88	APR 29,88	<T 0.06	<T 0.04	<T 0.015	<T 0.020	0.030	D 0.300	D 0.0135
MAY 14,88	MAY 13,88	D 2.16	0.28	D 0.300	D 0.255	0.070	1.230	0.0347
MAY 16,88	MAY 15,88	1.12	0.35	0.185	0.190	0.105	0.886	!IS *****
MAY 17,88	MAY 16,88	0.26	0.08	0.035	0.025	0.035	0.744	0.0851
MAY 19,88	MAY 18,88	0.24	0.05	D 0.040	<T 0.020	<T 0.020	0.180	0.0324
MAY 20,88	MAY 19,88	<T 0.04	<W 0.01	<W 0.005	<T 0.010	<T 0.015	0.230	D 0.0032
MAY 21,88	MAY 20,88	<W 0.02	<T 0.01	<W 0.005	<T 0.010	<T 0.010	0.116	0.0074

ONTARIO MINISTRY OF THE ENVIRONMENT
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APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : CHARLESTON LAKE/DAILY/AEROCHEM #11

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REMOVAL DATE	EXPOSURE DATE	SAMPLING START/END HR. HR.	PRECIP START/END HR. HR.	SAMPLE TYPE 01-RAIN 02-SNOW 03-COMP/04-OTHER	GAUGE DEPTH(MM)	GAUGE TYPE 01-STD. 02-NIPHER	SAMPLE NUMBER	PROJECT CODE 02-APIOS 03-SPECIAL	SUBPROJECT CODE 01-MOE 03-AES	SAMPLER EFFICI- ENCY (%)	COMMENTS FIELD OFFICE
JUN 23,88	JUN 22,88	800 800	900 1200	1	7.5	1	54239	2	1	82	C J
JUN 26,88	JUN 25,88	800 800	530 1300	1	4.8	1	54240	2	1	103	
JUN 29,88	JUN 28,88	800 900	1000 1200	1	3.5	1	54241	2	1	106	H
JUL 1,88	JUN 30,88	600 1000	900 1100	1	29.6	1	54242	2	1	105	
JUL 12,88	JUL 11,88	600 600	1400 1600	1	****	1	54243	2	1	****	
JUL 14,88	JUL 13,88	800 800	400 730	1	****	1	54244	2	1	****	
JUL 18,88	JUL 17,88	600 600	630 1100	1	12.0	1	54245	2	1	104	
JUL 19,88	JUL 18,88	600 600	2400 400	1	****	1	54246	2	1	****	
JUL 20,88	JUL 19,88	600 600	1400 1800	1	5.6	1	54247	2	1	101	
JUL 22,88	JUL 21,88	600 600	730 1400	1	1.6	1	54249	2	1	80	
JUL 24,88	JUL 23,88	600 600	****	1	17.8	1	54250	2	1	104	
JUL 26,88	JUL 25,88	600 800	800 700	1	1.2	1	54251	2	1	78	C
AUG 7,88	AUG 6,88	600 900	630 1200	1	9.0	1	54252	2	1	107	
AUG 14,88	AUG 13,88	800 900	1730 2330	1	18.8	1	54253	2	1	102	
AUG 18,88	AUG 17,88	900 900	1100 1130	1	1.8	1	54254	2	1	84	
AUG 21,88	AUG 20,88	900 900	1700 1900	1	5.5	1	54255	2	1	99	HM
AUG 24,88	AUG 23,88	900 800	2000 800	1	9.4	1	54256	2	1	98	
AUG 25,88	AUG 24,88	800 800	800 400	1	21.8	1	54257	2	1	104	
AUG 26,88	AUG 25,88	800 800	1700 1900	1	25.0	1	54258	2	1	U 169	P M
AUG 27,88	AUG 26,88	800 800	1700 1830	1	21.0	1	54259	2	1	101	HM
AUG 28,88	AUG 27,88	800 815	2400 100	1	1.8	1	54260	2	1	91	
AUG 29,88	AUG 28,88	815 900	815 1500	1	6.2	1	54261	2	1	99	
AUG 31,88	AUG 30,88	600 600	1500 1700	1	0.6	1	54263	2	1	104	
SEP 4,88	SEP 3,88	800 900	2300 500	1	3.0	1	54264	2	1	70	
SEP 5,88	SEP 4,88	900 900	900 100	1	3.8	1	54265	2	1	97	
SEP 13,88	SEP 12,88	800 600	1400 500	1	9.0	1	54266	2	1	96	CD
SEP 18,88	SEP 17,88	600 900	700 2100	1	2.6	1	54267	2	1	76	
SEP 21,88	SEP 20,88	700 600	830 930	1	2.4	1	54268	2	1	87	A
SEP 22,88	SEP 21,88	600 600	1430 1530	1	1.6	1	54269	2	1	93	
SEP 23,88	SEP 22,88	600 900	2400 500	1	9.0	1	54270	2	1	99	
SEP 28,88	SEP 27,88	800 600	****	1	8.6	1	54271	2	1	102	
OCT 2,88	OCT 1,88	700 600	****	1	2.4	1	54272	2	1	78	
OCT 3,88	OCT 2,88	600 600	1000 100	1	38.6	1	54273	2	1	82	
OCT 6,88	OCT 5,88	600 900	600 1200	1	9.6	1	54275	2	1	91	
OCT 18,88	OCT 17,88	700 730	2400 730	1	28.6	1	54276	2	1	34	N
OCT 19,88	OCT 18,88	730 830	730 1000	1	3.8	1	54277	2	1	84	HM
OCT 22,88	OCT 21,88	800 930	1700 930	1	38.2	1	54278	2	1	110	NHM
OCT 23,88	OCT 22,88	930 600	930 100	2	19.1	2	54279	2	1	89	NC
OCT 24,88	OCT 23,88	600 600	1300 100	1	0.6	2	54280	2	1	72	
OCT 25,88	OCT 24,88	600 900	1000 1530	1	11.3	2	54281	2	1	108	Q

ONTARIO MINISTRY OF THE ENVIRONMENT
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STATION NAME : CHARLESTON LAKE/DAILY/AEROCHEM #11

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REMOVAL DATE	EXPOSURE DATE	VOLUME ML	CONDUCT. UMHO/CM	PH FIELD	PH LAB	TOTAL H+ TO PH8.3 MG/L	TOTAL H+ GRAN MG/L	SULPHATE MG/L	NITRATE AS N MG/L	
JUN 23,88	JUN 22,88	397.0	18.0	5.19	UG	6.16	*****	0.0269	3.60	0.68
JUN 26,88	JUN 25,88	317.0	40.0	*****		4.09	*****	0.1120	4.85	0.74
JUN 29,88	JUN 28,88	239.0	5.0	*****	UG	5.75	*****	0.0196	0.85	0.09
JUL 1,88	JUN 30,88	1999.0	2.0	*****	UG	5.99	*****	0.0191	0.30	0.07
JUL 12,88	JUL 11,88	815.0	74.0	*****		3.79	*****	0.2040	9.55	0.83
JUL 14,88	JUL 13,88	859.0	32.5	*****		4.19	*****	0.0949	4.25	0.50
JUL 18,88	JUL 17,88	800.0	5.0	*****		5.01	*****	0.0276	0.55	0.12
JUL 19,88	JUL 18,88	91.0	44.0	*****		4.18	*****	0.1070	6.45	1.10
JUL 20,88	JUL 19,88	365.0	43.5	*****		4.08	*****	0.1210	5.05	0.79
JUL 22,88	JUL 21,88	83.0	24.0	*****		4.32	*****	0.0786	2.25	0.65
JUL 24,88	JUL 23,88	1190.0	13.5	*****		4.53	*****	0.0536	1.15	0.27
JUL 26,88	JUL 25,88	60.0	90.0	*****		3.73	*****	0.2390	9.40	1.67
AUG 7,88	AUG 6,88	622.0	56.0	*****		3.94	*****	0.1540	6.80	0.62
AUG 14,88	AUG 13,88	1239.0	33.0	*****		4.31	*****	0.0954	4.50	0.64
AUG 18,88	AUG 17,88	98.0	18.0	4.74	!IS	*****	*****	2.70	0.55	
AUG 21,88	AUG 20,88	351.0	16.0	4.64		4.73	*****	0.0430	2.90	0.14
AUG 24,88	AUG 23,88	591.0	54.0	3.86		3.89	*****	0.1590	4.30	0.90
AUG 25,88	AUG 24,88	1458.0	32.5	4.08		4.14	*****	0.0949	3.15	0.34
AUG 26,88	AUG 25,88	2717.0	18.0	4.51	D	4.59	*****	0.0464	D	1.10
AUG 27,88	AUG 26,88	1366.0	7.0	4.95		5.12	*****	0.0301	<T	0.17
AUG 28,88	AUG 27,88	106.0	94.0	3.61		3.69	*****	0.2710	0.10	0.11
AUG 29,88	AUG 28,88	395.0	34.0	4.08		4.19	*****	0.1060	8.65	1.45
AUG 31,88	AUG 30,88	40.0	8.0	*****	!IS	*****	*****	0.1060	3.80	0.30
SEP 4,88	SEP 3,88	135.0	94.5	3.72		3.67	*****	0.2720	<W	0.05
SEP 5,88	SEP 4,88	238.0	58.0	3.91		3.87	*****	0.1760	9.90	1.32
SEP 13,88	SEP 12,88	559.0	32.0	4.23	D	4.24	*****	0.0804	5.75	0.57
SEP 18,88	SEP 17,88	127.0	89.0	3.77	D	3.75	*****	0.1990	3.60	0.37
SEP 21,88	SEP 20,88	134.0	45.0	4.06	D	4.11	*****	0.1070	D	7.20
SEP 22,88	SEP 21,88	96.0	12.5	4.64		4.77	*****	0.0414	D	4.40
SEP 23,88	SEP 22,88	575.0	27.5	4.22		4.24	*****	0.0795	1.80	0.14
SEP 28,88	SEP 27,88	563.0	51.0	*****		4.01	*****	0.1210	2.20	0.38
OCT 2,88	OCT 1,88	120.0	73.0	*****		3.78	*****	0.1960	7.70	1.18
OCT 3,88	OCT 2,88	2050.0	22.5	*****		4.28	*****	0.0729	9.15	1.16
OCT 6,88	OCT 5,88	566.0	23.0	*****		4.29	*****	0.0715	2.76	0.27
OCT 18,88	OCT 17,88	633.0	19.0	*****		4.38	*****	0.0620	1.59	0.59
OCT 19,88	OCT 18,88	207.0	19.0	*****		4.44	*****	0.0629	3.15	<T
OCT 22,88	OCT 21,88	2718.0	3.0	*****		5.16	*****	0.0245	2.95	0.34
OCT 23,88	OCT 22,88	1092.0	3.0	*****		4.58	*****	0.0245	LG	0.50
OCT 24,88	OCT 23,88	28.0	!IS *****	*****	!SM	*****	*****	0.0458	0.75	0.19
OCT 25,88	OCT 24,88	789.0	13.0	*****		4.56	*****	0.0504	!IS *****	!IS *****

ONTARIO MINISTRY OF THE ENVIRONMENT
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APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : CHARLESTON LAKE/DAILY/AEROCHEM #11

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REMOVAL DATE	EXPOSURE DATE	CALCIUM MG/L	CHLORIDE MG/L	MAGNESIUM MG/L	POTASSIUM MG/L	SODIUM MG/L	AMMONIUM AS N MG/L	FREE H+ LAB MG/L
JUN 23,88	JUN 22,88	1.00	0.16	0.210	0.095	0.045	0.928	UG 0.0007
JUN 26,88	JUN 25,88	0.58	0.18	0.090	0.075	0.035	0.534	0.0813
JUN 29,88	JUN 28,88	0.38	<T 0.02	0.040	<T 0.025	<T 0.005	0.078	UG 0.0018
JUL 1,88	JUN 30,88	0.14	<T 0.02	0.010	<T 0.015	<T 0.010	0.090	UG 0.0010
JUL 12,88	JUL 11,88	0.54	0.18	0.055	0.055	<T 0.020	0.746	0.1622
JUL 14,88	JUL 13,88	0.16	0.10	0.045	0.030	<T 0.020	0.630	0.0646
JUL 18,88	JUL 17,88	<T 0.04	<T 0.02	0.005	<T 0.010	<T 0.015	0.120	0.0098
JUL 19,88	JUL 18,88	0.66	0.22	0.110	0.125	0.075	1.460	0.0661
JUL 20,88	JUL 19,88	0.28	0.22	0.035	0.035	<T 0.025	0.740	0.0832
JUL 22,88	JUL 21,88	0.16	0.10	0.030	<T 0.015	<T 0.025	0.476	0.0479
JUL 24,88	JUL 23,88	<T 0.02	0.09	<W 0.005	0.040	<T 0.025	0.116	0.0295
JUL 26,88	JUL 25,88	0.58	0.32	0.105	0.080	0.030	1.100	0.1862
AUG 7,88	AUG 6,88	0.24	0.12	0.055	0.040	<T 0.020	0.560	0.1148
AUG 14,88	AUG 13,88	0.48	0.19	0.075	0.035	0.070	0.756	0.0490
AUG 18,88	AUG 17,88	!IS *****	<W 0.01	!IS *****	!IS *****	!IS *****	0.876	!IS *****
AUG 21,88	AUG 20,88	0.72	<T 0.04	0.115	0.030	0.035	0.366	0.0186
AUG 24,88	AUG 23,88	0.16	0.98	0.035	<T 0.020	0.035	0.350	0.1288
AUG 25,88	AUG 24,88	<T 0.06	<W 0.01	<T 0.015	<T 0.025	<T 0.015	0.390	0.0724
AUG 26,88	AUG 25,88	0.10	UG 1.39	0.035	0.025	<T 0.005	0.320	0.0257
AUG 27,88	AUG 26,88	0.16	<W 0.01	<T 0.015	<T 0.010	<W 0.005	0.300	0.0076
AUG 28,88	AUG 27,88	!IS *****	0.33	!IS *****	!IS *****	!IS *****	0.466	0.2042
AUG 29,88	AUG 28,88	<T 0.06	<T 0.03	<T 0.010	0.050	<W 0.005	0.640	0.0646
AUG 31,88	AUG 30,88	0.44	<W 0.01	0.070	0.035	0.035	0.300	!IS *****
SEP 4,88	SEP 3,88	0.72	0.28	0.120	0.030	<T 0.020	0.496	0.2138
SEP 5,88	SEP 4,88	<T 0.04	<W 0.01	<T 0.010	<T 0.015	<W 0.005	0.300	0.1349
SEP 13,88	SEP 12,88	0.26	0.14	0.045	0.050	0.045	0.370	D 0.0575
SEP 18,88	SEP 17,88	0.56	0.28	0.065	0.045	0.040	0.720	D 0.1778
SEP 21,88	SEP 20,88	0.32	0.22	0.055	D 0.045	D 0.125	D 0.430	0.0776
SEP 22,88	SEP 21,88	0.20	<T 0.02	<T 0.020	<T 0.015	<W 0.005	!IS *****	0.0170
SEP 23,88	SEP 22,88	<T 0.04	<T 0.05	<W 0.005	<W 0.005	<W 0.005	0.186	0.0575
SEP 28,88	SEP 27,88	0.98	0.39	0.170	0.050	D 0.035	0.846	0.0977
OCT 2,88	OCT 1,88	0.54	0.68	0.115	0.050	UG 0.270	0.740	0.1660
OCT 3,88	OCT 2,88	<T 0.04	0.08	<T 0.010	<T 0.010	0.035	0.276	0.0525
OCT 6,88	OCT 5,88	<T 0.04	0.04	<T 0.010	<T 0.010	<T 0.010	0.230	0.0513
OCT 18,88	OCT 17,88	0.16	0.24	0.035	0.030	0.040	0.210	0.0417
OCT 19,88	OCT 18,88	<T 0.08	0.21	<T 0.015	0.070	0.035	0.256	0.0363
OCT 22,88	OCT 21,88	<W 0.02	<W 0.01	<W 0.005	<W 0.005	<T 0.005	LQ 0.036	0.0069
OCT 23,88	OCT 22,88	<W 0.02	<W 0.01	<W 0.005	<T 0.005	<T 0.010	LQ 0.036	0.0263
OCT 24,88	OCT 23,88	!SM *****	!IS *****	!SM *****	!SM *****	!SM *****	!SM *****	!SM *****
OCT 25,88	OCT 24,88	0.14	0.15	0.025	<T 0.020	0.115	D 0.200	0.0275

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : CHARLESTON LAKE/DAILY/AEROCHEM #11

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REMOVAL DATE	EXPOSURE DATE	SAMPLING START/END HR. HR.	PRECIP START/END HR. HR.	SAMPLE TYPE 01-RAIN 02-SNOW 03-COMP/04-OTHER	GAUGE DEPTH(MM)	GAUGE TYPE 01-STD. 02-NIPHER	SAMPLE NUMBER	PROJECT CODE 02-APIOS 03-SPECIAL	SUBPROJECT CODE 01-MOE 03-AES	SAMPLER EFFICI- ENCY (%)	COMMENTS FIELD OFFICE
OCT 26,88	OCT 25,88	900 900	1400 1600	1	0.2	2	54282	2	1	101	N
OCT 27,88	OCT 26,88	900 900	1200 1500	1	0.4	2	54283	2	1	187	N
OCT 28,88	OCT 27,88	900 1100	730 1030	1	4.8	2	54284	2	1	122	N
NOV 2,88	NOV 1,88	700 600	1700 1100	3	10.2	2	54285	2	1	124	
NOV 3,88	NOV 2,88	600 600	600 1000	3	17.3	3	54286	2	1	95	N
NOV 5,88	NOV 4,88	800 900	100 700	1	0.6	2	54287	2	1	200	N
NOV 6,88	NOV 5,88	900 830	1800 300	1	20.0	2	54288	2	1	64	NC
NOV 7,88	NOV 6,88	830 730	1800 730	1	4.6	2	54290	2	1	104	
NOV 8,88	NOV 7,88	730 740	730 900	1	0.6	2	54291	2	1	70	
NOV 9,88	NOV 8,88	740 750	900 2300	1	7.0	2	54292	2	1	99	
NOV 11,88	NOV 10,88	800 1000	900 1400	1	2.6	2	54293	2	1	132	N
NOV 14,88	NOV 13,88	700 940	730 1900	1	7.5	2	54294	2	1	116	
NOV 17,88	NOV 16,88	700 900	1630 2300	1	1.6	2	54295	2	1	187	N
NOV 21,88	NOV 20,88	700 600	630 2200	3	20.2	2	54296	2	1	96	N
NOV 28,88	NOV 27,88	700 900	1700 2300	1	5.0	2	54297	2	1	135	N
DEC 1,88	NOV 30,88	800 900	1400 1600	1	0.4	2	54298	2	1	308	N
DEC 3,88	DEC 2,88	700 1100	730 1000	2	1.2	2	54299	2	1	41	N
DEC 14,88	DEC 13,88	1100 600	1400 2400	2	1.8	2	54300	2	1	99	C
DEC 15,88	DEC 14,88	600 600	1600 2300	2	4.4	2	54301	2	1	80	C
DEC 17,88	DEC 16,88	800 900	1900 300	2	0.3	2	54302	2	1	57	NC
DEC 18,88	DEC 17,88	900 900	1500 2100	2	1.4	2	54303	2	1	74	C
DEC 21,88	DEC 20,88	800 1000	1500 2300	1	2.3	2	54304	2	1	158	NC
DEC 24,88	DEC 23,88	600 1000	700 1000	3	6.2	2	54305	2	1	85	C
DEC 25,88	DEC 24,88	1000 1000	1600 2200	1	5.9	2	54306	2	1	106	C
DEC 28,88	DEC 27,88	800 1000	1200 1000	3	12.0	2	54307	2	1	92	C
DEC 29,88	DEC 28,88	1000 900	1000 1800	2	4.4	2	54308	2	1	80	C

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : CHARLESTON LAKE/DAILY/AEROCHEM #11

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REMOVAL DATE	EXPOSURE DATE	VOLUME ML	CONDUCT. UMHO/CM	PH FIELD	PH LAB	TOTAL H+ TO PH8.3 MG/L	TOTAL H+ GRAN MG/L	SULPHATE MG/L	NITRATE AS N MG/L
OCT 26,88	OCT 25,88	13.0	!IS *****	*****	5.09	*****	0.0265	1.05	0.12
OCT 27,88	OCT 26,88	48.0	*****	*****	!IS *****	*****	!IS *****	1.75	0.35
OCT 28,88	OCT 27,88	377.0	25.0	*****	4.26	*****	0.0765	2.68	0.42
NOV 2,88	NOV 1,88	812.0	33.5	*****	4.09	*****	0.1000	2.25	0.85
NOV 3,88	NOV 2,88	1057.0	7.0	*****	4.75	*****	0.0332	0.65	0.18
NOV 5,88	NOV 4,88	77.0	19.0	*****	4.42	*****	0.0550	1.50	0.32
NOV 6,88	NOV 5,88	830.0	6.0	4.72	4.72	*****	0.0361	0.55	0.17
NOV 7,88	NOV 6,88	308.0	22.0	4.29	4.26	*****	0.0721	1.70	0.50
NOV 8,88	NOV 7,88	27.0	!IS *****	*****	4.43	*****	0.0574	!IS *****	!IS *****
NOV 9,88	NOV 8,88	445.0	22.5	4.28	4.25	*****	0.0748	1.60	0.51
NOV 11,88	NOV 10,88	221.0	43.5	4.01	4.01	*****	0.1180	4.70	0.73
NOV 14,88	NOV 13,88	560.0	21.0	4.27	4.28	*****	0.0713	1.95	0.39
NOV 17,88	NOV 16,88	192.0	42.0	4.00	4.01	*****	0.1180	4.15	0.96
NOV 21,88	NOV 20,88	1244.0	10.0	4.56	4.59	*****	0.0429	1.00	0.29
NOV 28,88	NOV 27,88	435.0	42.5	4.05	4.10	*****	0.1130	3.45	0.86
DEC 1,88	NOV 30,88	79.0	53.0	*****	4.05	*****	0.1320	3.90	2.10
DEC 3,88	DEC 2,88	32.0	!IS *****	*****	4.88	*****	0.0286	!IS *****	!IS *****
DEC 14,88	DEC 13,88	115.0	20.0	*****	4.32	*****	0.0733	0.70	1.01
DEC 15,88	DEC 14,88	226.0	23.0	*****	4.22	*****	0.0897	1.55	1.00
DEC 17,88	DEC 16,88	11.0	11.0	*****	4.48	*****	0.0545	<T 0.15	0.57
DEC 18,88	DEC 17,88	67.0	40.0	*****	3.97	*****	0.1540	0.60	1.83
DEC 21,88	DEC 20,88	233.0	52.0	*****	3.91	*****	0.1830	6.85	1.41
DEC 24,88	DEC 23,88	341.0	13.0	*****	4.63	*****	0.0462	2.25	0.46
DEC 25,88	DEC 24,88	403.0	13.5	*****	4.41	*****	0.0603	1.50	0.41
DEC 28,88	DEC 27,88	715.0	11.5	*****	4.49	*****	0.0543	1.30	0.27
DEC 29,88	DEC 28,88	226.0	8.0	*****	4.73	*****	0.0398	0.55	0.42

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : CHARLESTON LAKE/DAILY/AEROCHEM #11

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REMOVAL DATE	EXPOSURE DATE	CALCIUM MG/L	CHLORIDE MG/L	MAGNESIM MG/L	POTASSIM MG/L	SODIUM MG/L	AMMONIUM AS N MG/L	FREE H+ LAB MG/L
OCT 26,88	OCT 25,88	!IS *****	<T 0.05	!IS *****	!IS *****	!IS *****	0.176	0.0081
OCT 27,88	OCT 26,88	0.34	0.24	<T 0.020	<T 0.020	<T 0.020	0.240	!IS *****
OCT 28,88	OCT 27,88	0.12	0.20	<T 0.020	<T 0.020	<T 0.025	0.176	0.0550
NOV 2,88	NOV 1,88	0.16	0.16	<T 0.020	<T 0.015	0.025	0.276	0.0813
NOV 3,88	NOV 2,88	<T 0.02	<W 0.01	<W 0.005	<T 0.005	<T 0.005	0.086	0.0178
NOV 5,88	NOV 4,88	<T 0.08	1.00	0.060	<T 0.020	0.485	0.096	0.0380
NOV 6,88	NOV 5,88	<T 0.02	0.08	<W 0.005	<T 0.005	<T 0.025	0.030	0.0191
NOV 7,88	NOV 6,88	<T 0.06	0.07	<T 0.010	<T 0.010	<T 0.015	0.216	0.0550
NOV 8,88	NOV 7,88	<T 0.04	!IS *****	<T 0.005	<W 0.005	0.075	0.036	0.0372
NOV 9,88	NOV 8,88	<T 0.06	0.15	<T 0.010	<T 0.005	<T 0.015	0.196	0.0562
NOV 11,88	NOV 10,88	0.52	0.52	0.060	0.040	0.270	0.296	0.0977
NOV 14,88	NOV 13,88	<T 0.04	0.27	<T 0.020	<T 0.010	0.135	0.200	0.0525
NOV 17,88	NOV 16,88	0.38	0.29	0.045	0.040	0.090	0.490	0.0977
NOV 21,88	NOV 20,88	<T 0.06	<T 0.03	<T 0.010	<T 0.010	<T 0.010	0.130	0.0257
NOV 28,88	NOV 27,88	0.38	<W 0.01	0.055	0.045	0.170	0.430	0.0794
DEC 1,88	NOV 30,88	1.46	0.93	0.170	0.100	0.135	0.876	0.0891
DEC 3,88	DEC 2,88	!IS *****	!IS *****	!IS *****	!IS *****	!IS *****	0.086	0.0132
DEC 14,88	DEC 13,88	0.68	0.84	0.125	<T 0.025	0.230	0.066	0.0479
DEC 15,88	DEC 14,88	0.20	0.19	0.025	<T 0.020	0.055	0.380	0.0603
DEC 17,88	DEC 16,88	0.10	0.35	<T 0.025	<T 0.020	0.160	LG 0.026	0.0331
DEC 18,88	DEC 17,88	0.46	1.53	0.070	<T 0.020	0.505	0.106	0.1072
DEC 21,88	DEC 20,88	1.02	1.08	0.135	0.085	0.505	0.556	0.1230
DEC 24,88	DEC 23,88	0.64	0.27	0.090	0.030	0.175	0.190	0.0234
DEC 25,88	DEC 24,88	0.12	0.07	<T 0.010	<T 0.020	<T 0.015	0.170	0.0389
DEC 28,88	DEC 27,88	<T 0.10	0.23	<T 0.015	<T 0.010	0.095	0.116	0.0324
DEC 29,88	DEC 28,88	<T 0.04	0.12	<T 0.005	<T 0.015	0.040	0.246	0.0186

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : RAILTON/DAILY/AEROCHEM

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REMOVAL DATE	EXPOSURE DATE	SAMPLING START/END HR. HR.	PRECIP START/END HR. HR.	SAMPLE TYPE 01-RAIN 02-SNOW 03-COMP/04-OTHER	GAUGE DEPTH(MM)	GAUGE TYPE 01-STD. 02-NIPHER	SAMPLE NUMBER	PROJECT CODE 02-APIOS 03-SPECIAL	SUBPROJECT CODE 01-MOE 03-AES	SAMPLER EFFICI- ENCY (%)	COMMENTS FIELD OFFICE
JAN 9,88	JAN 8,88	800 800	900 1900	2	5.1	2	91806	2	1	107	
JAN 13,88	JAN 12,88	800 800	350 415	1	2.0	2	91807	2	1	72	
JAN 18,88	JAN 17,88	900 900	1600 2359	1	0.3	2	91809	2	1	72	C
JAN 19,88	JAN 18,88	900 800	1100 1700	1	3.5	2	91811	2	1	92	N
JAN 20,88	JAN 19,88	800 800	800 2200	1	18.5	2	91813	2	1	38	
JAN 25,88	JAN 24,88	800 800	800 2200	2	2.0	2	91816	2	1	38	N
JAN 29,88	JAN 28,88	800 800	800 2200	2	0.7	2	91817	2	1	64	EFIK
JAN 31,88	JAN 30,88	800 800	1500 2100	1	4.6	2	91819	2	1	51	
FEB 2,88	FEB 1,88	800 800	1900 2400	3	10.0	2	91821	2	1	49	
FEB 8,88	FEB 7,88	800 800	800 2200	2	7.3	2	91823	2	1	5	N
FEB 10,88	FEB 9,88	800 800	900 1630	2	4.4	2	91825	2	1	25	N
FEB 13,88	FEB 11,88	800 800	800 2200	2	28.5	2	91827	2	1	38	NY2
FEB 16,88	FEB 14,88	800 800	800 2200	1	11.5	2	91829	2	1	73	C
FEB 20,88	FEB 18,88	800 800	800 2100	2	24.7	2	91831	2	1	75	Y2
MAR 1,88	FEB 29,88	800 800	1 600	2	1.1	2	91833	2	1	720	Y2
MAR 20,88	MAR 11,88	800 800	800 2200	2	6.1	2	91835	2	1	47	NZ
APR 4,88	APR 2,88	800 800	100 1800	1	43.2	2	91837	2	1	55	NZ
APR 5,88	APR 4,88	800 800	1400 1600	1	0.5	2	91839	2	1	137	Y2
APR 9,88	APR 7,88	800 800	300 2300	3	2.7	2	91841	2	1	121	N
APR 15,88	APR 14,88	800 800	1200 1800	1	4.0	2	91844	2	1	149	NY2
APR 18,88	APR 17,88	800 800	2400 200	1	0.2	2	91848	2	1	351	N
APR 21,88	APR 20,88	800 800	2300 100	2	6.4	2	91850	2	1	107	
APR 23,88	APR 22,88	800 800	2300 2330	1	4.2	2	91851	2	1	79	
APR 29,88	APR 27,88	800 800	2000 2300	1	14.4	1	91853	2	1	92	Y2
APR 30,88	APR 29,88	800 800	800 2200	1	6.2	1	91855	2	1	86	
MAY 10,88	MAY 9,88	800 800	1630 2100	1	0.6	1	91857	2	1	54	C
MAY 14,88	MAY 13,88	800 800	1600 2400	1	8.7	1	91859	2	1	94	C
MAY 17,88	MAY 16,88	800 800	800 2200	1	3.2	1	91862	2	1	84	
MAY 19,88	MAY 18,88	800 800	1700 2300	1	2.9	1	91864	2	1	114	C
MAY 20,88	MAY 19,88	800 800	1200 700	1	19.3	1	91866	2	1	99	
MAY 21,88	MAY 20,88	800 800	815 1100	1	1.0	1	91868	2	1	37	N
JUN 2,88	JUN 1,88	800 800	815 1600	1	4.1	1	91869	2	1	89	
JUN 4,88	JUN 3,88	800 800	1400 1430	1	2.0	1	91872	2	1	96	C
JUN 23,88	JUN 22,88	800 800	1100 1400	1	5.3	1	91874	2	1	3	CDJ
JUN 26,88	JUN 25,88	800 800	1100 1330	1	7.0	1	91877	2	1	83	C
JUN 27,88	JUN 26,88	800 800	800 2200	1	0.6	1	91878	2	1	44	
JUN 29,88	JUN 28,88	800 800	1100 1630	1	2.4	1	91881	2	1	98	N
JUL 2,88	JUL 1,88	800 800	900 1400	1	6.9	1	91882	2	1	47	J
JUL 18,88	JUL 16,88	800 800	300 1200	1	29.4	1	91884	2	1	105	N
JUL 19,88	JUL 18,88	800 800	430 600	1	1.0	1	91885	2	1	76	Z

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : RAILTON/DAILY/AEROCHEM

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REMOVAL DATE	EXPOSURE DATE	VOLUME ML	CONDUCT. UMHO/CM	PH FIELD	PH LAB	TOTAL H+ TO PH8.3 MG/L	TOTAL H+ GRAN MG/L	SULPHATE MG/L	NITRATE AS N MG/L
JAN 9,88	JAN 8,88	350.0	27.5	*****	4.25	*****	0.0842	2.15	0.56
JAN 13,88	JAN 12,88	93.0	> 100.0	*****	LG 3.54	*****	UG 0.3630	9.00	3.22
JAN 18,88	JAN 17,88	*****	*****	*****	*****	*****	*****	*****	*****
JAN 19,88	JAN 18,88	208.0	36.0	*****	4.09	*****	0.1100	2.60	0.71
JAN 20,88	JAN 19,88	462.0	26.0	*****	4.25	*****	0.0822	2.25	0.52
JAN 25,88	JAN 24,88	*****	*****	*****	*****	*****	*****	*****	*****
JAN 29,88	JAN 28,88	29.0	37.0	*****	4.30	*****	0.0807	0.60	1.42
JAN 31,88	JAN 30,88	153.0	80.0	*****	4.00	*****	0.1660	9.65	2.72
FEB 2,88	FEB 1,88	315.0	24.0	*****	4.38	*****	0.0717	2.80	0.42
FEB 8,88	FEB 7,88	24.0	26.0	*****	4.45	*****	0.0573	1.20	0.90
FEB 10,88	FEB 9,88	73.0	50.0	*****	3.98	*****	0.1280	1.05	1.54
FEB 13,88	FEB 11,88	704.0	10.5	*****	4.74	*****	0.0350	0.60	0.25
FEB 16,88	FEB 14,88	539.0	31.5	*****	4.18	*****	0.0854	2.65	0.50
FEB 20,88	FEB 18,88	1195.0	34.0	*****	4.13	*****	0.0897	3.05	0.51
MAR 1,88	FEB 29,88	508.0	32.0	*****	4.41	*****	0.0616	2.85	1.14
MAR 20,88	MAR 11,88	187.0	64.5	*****	4.19	*****	0.1040	7.45	2.18
APR 4,88	APR 2,88	1538.0	33.0	4.22	4.19	*****	0.0873	3.25	0.45
APR 5,88	APR 4,88	44.0	68.0	*****	3.94	*****	0.1550	6.70	1.39
APR 9,88	APR 7,88	210.0	40.5	4.11	4.12	*****	0.1000	4.15	0.58
APR 15,88	APR 14,88	383.0	> 100.0	3.71	3.71	*****	0.2510	8.55	2.94
APR 18,88	APR 17,88	45.0	56.0	*****	UG 7.46	*****	LG 0.0153	6.45	1.90
APR 21,88	APR 20,88	440.0	19.5	*****	4.95	*****	0.0363	1.75	0.87
APR 23,88	APR 22,88	213.0	46.5	*****	4.26	*****	0.0938	5.15	1.18
APR 29,88	APR 27,88	855.0	29.5	*****	4.45	*****	0.0682	2.90	0.78
APR 30,88	APR 29,88	345.0	16.0	*****	4.70	*****	0.0459	1.85	0.26
MAY 10,88	MAY 9,88	21.0	!IS *****	*****	4.03	*****	U 0.1600	!IS *****	!IS *****
MAY 14,88	MAY 13,88	529.0	49.5	*****	4.29	*****	0.0981	6.85	1.45
MAY 17,88	MAY 16,88	174.0	90.0	*****	3.77	*****	0.2480	9.85	1.26
MAY 19,88	MAY 18,88	212.0	37.0	*****	4.23	*****	0.0925	4.05	0.77
MAY 20,88	MAY 19,88	1227.0	6.5	*****	5.07	*****	0.0278	0.75	0.13
MAY 21,88	MAY 20,88	24.0	11.0	*****	5.22	*****	0.0276	1.60	0.22
JUN 2,88	JUN 1,88	234.0	55.5	4.13	4.18	*****	0.1110	9.35	0.72
JUN 4,88	JUN 3,88	124.0	7.0	UG 6.97	UG 6.98	*****	0.0156	0.70	0.24
JUN 23,88	JUN 22,88	11.0	77.0	*****	U 7.95	*****	<W 0.0010	6.10	0.21
JUN 26,88	JUN 25,88	373.0	64.0	3.91	3.97	*****	0.1500	8.20	1.13
JUN 27,88	JUN 26,88	17.0	LG 3.0	*****	UG 6.02	*****	0.0163	LG 0.40	LG 0.06
JUN 29,88	JUN 28,88	152.0	6.5	UG 6.16	UG 6.92	*****	0.0169	0.75	0.10
JUL 2,88	JUL 1,88	212.0	10.0	UG 6.75	UG 7.12	*****	0.0164	1.10	0.27
JUL 18,88	JUL 16,88	1996.0	28.0	*****	4.35	*****	0.0886	3.60	0.51
JUL 19,88	JUL 18,88	49.0	47.0	*****	!IR *****	*****	!IR *****	7.10	1.38

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : RAILTON/DAILY/AEROCHEM

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REMOVAL DATE	EXPOSURE DATE	CALCIUM MG/L	CHLORIDE MG/L	MAGNESIUM MG/L	POTASSIUM MG/L	SODIUM MG/L	AMMONIUM AS N MG/L	FREE H+ LAB MG/L
JAN 9,88	JAN 8,88	0.22	0.08	0.025	<T 0.005	0.070	0.110	0.0562
JAN 13,88	JAN 12,88	0.54	0.90	0.065	0.075	0.355	1.250	0.2884
JAN 18,88	JAN 17,88	*****	*****	*****	*****	*****	*****	*****
JAN 19,88	JAN 18,88	0.12	0.15	<T 0.005	<T 0.015	0.035	0.300	0.0813
JAN 20,88	JAN 19,88	0.16	0.11	<T 0.010	<T 0.015	0.040	0.230	0.0562
JAN 25,88	JAN 24,88	*****	*****	*****	*****	*****	*****	*****
JAN 29,88	JAN 28,88	!IS *****	1.72	!IS *****	!IS *****	!IS *****	0.110	0.0501
JAN 31,88	JAN 30,88	UG 2.82	UG 2.32	0.305	0.195	UG 1.710	1.690	0.1000
FEB 2,88	FEB 1,88	0.22	0.10	<T 0.020	<T 0.025	0.045	0.370	0.0417
FEB 8,88	FEB 7,88	!IS *****	0.68	!IS *****	!IS *****	!IS *****	!IS *****	0.0355
FEB 10,88	FEB 9,88	0.52	0.75	0.040	<T 0.015	0.175	0.180	0.1047
FEB 13,88	FEB 11,88	<T 0.02	<T 0.01	<T 0.005	<T 0.015	0.030	0.120	0.0182
FEB 16,88	FEB 14,88	<T 0.08	0.14	<T 0.015	<T 0.020	0.075	0.300	0.0661
FEB 20,88	FEB 18,88	<T 0.04	<T 0.02	<T 0.005	<T 0.010	0.025	0.390	0.0741
MAR 1,88	FEB 29,88	0.76	0.31	0.105	0.055	0.190	0.750	0.0389
MAR 20,88	MAR 11,88	UG 2.86	0.99	0.335	0.095	UG 0.605	1.220	0.0646
APR 4,88	APR 2,88	0.16	0.16	0.030	0.025	0.105	0.350	0.0646
APR 5,88	APR 4,88	0.22	0.45	0.045	<T 0.025	0.045	!IS *****	0.1148
APR 9,88	APR 7,88	0.22	0.10	0.030	<T 0.020	0.060	0.500	0.0759
APR 15,88	APR 14,88	1.42	0.99	0.210	D 0.185	0.400	1.370	0.1950
APR 18,88	APR 17,88	UG 3.10	0.53	UG 0.865	0.215	0.175	!IS *****	UG 0.0000
APR 21,88	APR 20,88	0.46	0.11	0.080	0.030	0.025	0.725	0.0112
APR 23,88	APR 22,88	0.86	0.22	0.120	0.085	0.110	1.000	0.0550
APR 29,88	APR 27,88	0.38	0.14	0.070	0.040	0.030	0.700	0.0355
APR 30,88	APR 29,88	<T 0.08	0.07	<T 0.020	<T 0.025	0.030	0.325	0.0200
MAY 10,88	MAY 9,88	UG 4.50	!IS *****	0.500	UG 0.420	UG 0.400	1.525	0.0933
MAY 14,88	MAY 13,88	1.52	0.24	0.200	0.080	0.055	1.200	0.0513
MAY 17,88	MAY 16,88	0.66	0.23	0.090	0.135	0.080	1.025	0.1698
MAY 19,88	MAY 18,88	0.46	0.09	0.085	0.070	0.025	0.625	0.0589
MAY 20,88	MAY 19,88	<W 0.02	<T 0.01	<W 0.005	<T 0.020	<T 0.010	0.225	0.0085
MAY 21,88	MAY 20,88	0.20	0.09	<T 0.020	0.060	0.045	0.450	0.0060
JUN 2,88	JUN 1,88	1.70	0.17	0.250	0.245	0.100	0.926	0.0661
JUN 4,88	JUN 3,88	0.80	0.08	0.105	0.060	0.045	0.224	UG 0.0001
JUN 23,88	JUN 22,88	U 7.48	0.91	U 0.860	<T 0.005	<W 0.005	2.460	U 0.0000
JUN 26,88	JUN 25,88	1.18	0.31	0.155	0.200	0.045	0.928	0.1072
JUN 27,88	JUN 26,88	0.14	0.06	0.045	<W 0.005	0.050	0.110	UG 0.0010
JUN 29,88	JUN 28,88	0.76	0.08	0.045	0.170	0.050	0.084	UG 0.0001
JUL 2,88	JUL 1,88	1.00	0.06	0.065	0.050	0.030	0.400	UG 0.0001
JUL 18,88	JUL 16,88	0.28	0.10	0.045	<T 0.020	<T 0.020	0.556	0.0447
JUL 19,88	JUL 18,88	1.34	0.29	0.165	0.235	0.150	1.480	!IR *****

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : RAILTON/DAILY/AEROCHEM

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REMOVAL DATE	EXPOSURE DATE	SAMPLING START/END HR. HR.	PRECIP START/END HR. HR.	SAMPLE TYPE 01-RAIN 02-SNOW 03-COMP/04-OTHER	GAUGE DEPTH(MM)	GAUGE TYPE 01-STD. 02-NIPHER	SAMPLE NUMBER	PROJECT CODE 02-APIOS 03-SPECIAL	SUBPROJECT CODE 01-MOE 03-AES	SAMPLER EFFICI- ENCY (%)	COMMENTS FIELD OFFICE
JUL 22,88	JUL 21,88	800 800	800 900	1	1.2	1	91886	2	1	97	
JUL 25,88	JUL 24,88	800 800	****	1	****	1	91887	2	1	****	G X
JUL 27,88	JUL 26,88	800 800	1500 1530	1	2.5	1	91889	2	1	87	C
AUG 4,88	AUG 3,88	800 800	****	1	1.4	1	91891	2	1	125	N
AUG 6,88	AUG 5,88	800 800	****	1	2.4	1	91893	2	1	81	D
AUG 10,88	AUG 9,88	800 800	400 430	1	0.6	1	91896	2	1	91	
AUG 21,88	AUG 20,88	800 800	1800 2100	1	8.0	1	91898	2	1	72	A HM
AUG 26,88	AUG 25,88	800 800	****	1	24.7	1	91900	2	1	92	
AUG 31,88	AUG 30,88	800 800	****	1	16.1	1	91903	2	1	101	HM
SEP 6,88	SEP 5,88	800 800	****	1	7.2	1	91906	2	1	85	
SEP 13,88	SEP 12,88	800 800	2400 400	1	6.0	1	91908	2	1	92	
SEP 15,88	SEP 14,88	800 800	1830 2100	1	1.3	1	91912	2	1	85	H
SEP 18,88	SEP 17,88	800 800	2200 2400	1	6.3	1	91913	2	1	97	
SEP 21,88	SEP 20,88	800 800	****	1	8.0	1	91916	2	1	102	
SEP 23,88	SEP 22,88	800 800	200 800	1	13.5	1	91917	2	1	97	
SEP 28,88	SEP 27,88	800 800	1800 2200	1	4.0	1	91919	2	1	108	
OCT 3,88	OCT 2,88	800 800	800 1800	1	28.2	1	91922	2	1	103	N
OCT 5,88	OCT 4,88	800 800	130 800	1	13.8	1	91923	2	1	92	
OCT 11,88	OCT 10,88	800 800	1500 1700	1	9.6	1	91926	2	1	84	
OCT 19,88	OCT 17,88	800 800	200 800	1	18.0	1	91928	2	1	87	NY2
OCT 24,88	OCT 21,88	800 800	****	1	38.2	1	91929	2	1	65	NHMY3
OCT 25,88	OCT 24,88	800 800	800 800	1	13.5	1	91932	2	1	85	
OCT 26,88	OCT 25,88	800 800	800 800	1	0.8	1	91934	2	1	60	H
OCT 29,88	OCT 27,88	800 800	600 1200	1	12.2	1	91936	2	1	84	Q HCMY2
NOV 3,88	NOV 1,88	800 800	500 1200	1	11.4	1	91938	2	1	96	CHY2
NOV 12,88	NOV 3,88	800 800	****	1	31.8	1	91939	2	1	92	NZ
NOV 13,88	NOV 12,88	800 800	800 1200	1	****	*	91941	2	1	****	P
NOV 14,88	NOV 13,88	800 800	900 1700	1	3.4	1	91943	2	1	102	
NOV 15,88	NOV 14,88	800 800	****	1	24.0	1	91945	2	1	82	N
NOV 28,88	NOV 27,88	800 800	****	1	5.6	1	91947	2	1	98	C
DEC 1,88	NOV 30,88	800 800	****	3	14.8	2	91950	2	1	46	XN
DEC 12,88	DEC 12,88	800 800	1100 1500	2	2.0	2	91952	2	1	63	XZ
DEC 18,88	DEC 16,88	800 800	100 1400	2	17.8	2	91954	2	1	50	XNZ
DEC 22,88	DEC 21,88	800 800	****	2	3.4	2	91956	2	1	98	C X
DEC 28,88	DEC 22,88	800 800	****	3	30.5	2	91958	2	1	72	XNZ
DEC 29,88	DEC 28,88	800 800	800 1400	3	2.8	2	91960	2	1	47	XN

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ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : WILMER/DAILY/AEROCHEM

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REMOVAL DATE	EXPOSURE DATE	SAMPLING START/END HR. HR.	PRECIP START/END HR. HR.	SAMPLE TYPE 01-RAIN 02-SNOW 03-COMP/04-OTHER	GAUGE DEPTH(MM)	GAUGE TYPE 01-STD. 02-NIPHER	SAMPLE NUMBER	PROJECT CODE 02-APIOS 03-SPECIAL	SUBPROJECT CODE 01-MOE 03-AES	SAMPLER EFFICI- ENCY (%)	COMMENTS FIELD OFFICE
JAN 1,88	DEC 31,87	700 900	1430 1700	3	0.6	2	60253	2	1	109	
JAN 3,88	JAN 2,88	800 800	****	2	0.2	2	60254	2	1	****	EK
JAN 4,88	JAN 3,88	800 700	600 700	2	0.2	2	60255	2	1	****	EK
JAN 5,88	JAN 4,88	700 700	700 1400	2	3.2	2	60256	2	1	35	N
JAN 9,88	JAN 8,88	700 700	900 1630	2	3.2	2	60257	2	1	88	
JAN 12,88	JAN 11,88	700 700	****	2	0.4	2	60258	2	1	****	EK
JAN 13,88	JAN 12,88	700 700	****	1	1.8	2	60259	2	1	92	
JAN 14,88	JAN 13,88	700 700	****	1	0.2	2	60260	2	1	****	EK
JAN 15,88	JAN 14,88	700 700	****	2	0.8	2	60261	2	1	48	N
JAN 16,88	JAN 15,88	700 700	****	2	0.4	2	60262	2	1	****	EK
JAN 18,88	JAN 17,88	800 700	1200 1600	1	0.8	2	60263	2	1	126	N
JAN 19,88	JAN 18,88	700 700	****	1	2.4	2	60264	2	1	101	
JAN 20,88	JAN 19,88	700 700	****	1	4.0	2	60265	2	1	109	M
JAN 21,88	JAN 20,88	700 700	****	1	5.0	2	60266	2	1	118	
JAN 22,88	JAN 21,88	700 700	****	1	0.4	2	60267	2	1	****	EK
JAN 23,88	JAN 22,88	700 700	****	2	0.2	2	60268	2	1	****	EK
JAN 25,88	JAN 24,88	700 700	1030 1700	2	10.4	2	60269	2	1	61	
FEB 2,88	FEB 1,88	700 700	****	3	10.0	2	60273	2	1	54	
FEB 4,88	FEB 3,88	700 700	2130 700	2	7.6	2	60274	2	1	4	C N
FEB 5,88	FEB 4,88	700 700	700 1100	2	0.4	2	60275	2	1	****	EK
FEB 6,88	FEB 5,88	700 700	****	2	0.2	2	60276	2	1	****	EK
FEB 7,88	FEB 6,88	700 700	****	2	0.4	2	60277	2	1	****	EK
FEB 8,88	FEB 7,88	700 700	1000 2400	2	6.4	2	60278	2	1	7	N
FEB 10,88	FEB 9,88	700 700	****	2	3.4	2	60279	2	1	71	
FEB 12,88	FEB 11,88	700 800	200 800	2	16.8	2	60280	2	1	56	M
FEB 13,88	FEB 12,88	800 700	800 1600	2	10.4	2	60281	2	1	55	M
FEB 15,88	FEB 14,88	700 700	300 700	3	8.0	2	60282	2	1	79	C
FEB 16,88	FEB 15,88	700 700	1030 1200	3	4.2	2	60283	2	1	103	
FEB 17,88	FEB 16,88	700 700	****	2	0.4	2	60284	2	1	97	
FEB 20,88	FEB 19,88	700 800	1700 200	3	24.6	2	60285	2	1	67	
FEB 21,88	FEB 20,88	800 800	****	2	0.2	2	60287	2	1	****	EK
FEB 23,88	FEB 22,88	700 700	1800 2100	1	8.4	2	60288	2	1	108	C
FEB 27,88	FEB 26,88	700 700	****	2	0.2	2	60289	2	1	****	EK
FEB 29,88	FEB 28,88	700 700	****	2	0.4	2	60290	2	1	****	EK
MAR 9,88	MAR 8,88	700 700	****	1	0.2	2	60291	2	1	****	EK
MAR 10,88	MAR 9,88	700 700	****	1	4.6	2	60292	2	1	126	N
MAR 13,88	MAR 12,88	700 700	****	4	2.4	2	60293	2	1	125	N
MAR 14,88	MAR 13,88	700 700	****	2	0.2	2	60294	2	1	****	EK
MAR 15,88	MAR 14,88	700 700	****	2	0.4	2	60295	2	1	****	EK
MAR 19,88	MAR 18,88	700 700	1400 2030	2	1.0	2	60296	2	1	****	EK

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : WILMER/DAILY/AEROCHEM				#9A	PAGE : 2					
REMOVAL DATE	EXPOSURE DATE	VOLUME ML	CONDUCT. UMHO/CM	PH FIELD	PH LAB	TOTAL H+ TO PH8.3 MG/L	TOTAL H+ GRAN MG/L	SULPHATE MG/L	NITRATE AS N MG/L	
JAN 1,88	DEC 31,87	42.0	75.0	*****	3.88	*****	0.1900	9.05	2.04	
JAN 3,88	JAN 2,88	*****	*****	*****	*****	*****	*****	*****	*****	
JAN 4,88	JAN 3,88	*****	*****	*****	*****	*****	*****	*****	*****	
JAN 5,88	JAN 4,88	72.0	36.5	*****	4.13	*****	0.1110	2.75	1.14	
JAN 9,88	JAN 8,88	182.0	17.0	*****	D 4.56	*****	0.0523	0.95	0.77	
JAN 12,88	JAN 11,88	*****	*****	*****	*****	*****	*****	*****	*****	
JAN 13,88	JAN 12,88	107.0	> 100.0	*****	LG 3.59	*****	UG 0.3350	8.85	3.22	
JAN 14,88	JAN 13,88	*****	*****	*****	*****	*****	*****	*****	*****	
JAN 15,88	JAN 14,88	25.0	!IS *****	*****	4.88	*****	0.0399	0.95	0.89	
JAN 16,88	JAN 15,88	*****	*****	*****	*****	*****	*****	*****	*****	
JAN 18,88	JAN 17,88	65.0	81.5	*****	3.71	*****	0.2500	5.10	2.06	
JAN 19,88	JAN 18,88	156.0	D 31.5	*****	D 4.11	*****	0.1100	D 2.35	0.74	
JAN 20,88	JAN 19,88	280.0	7.5	*****	D 4.80	*****	D 0.0368	1.00	0.18	
JAN 21,88	JAN 20,88	379.0	39.0	*****	4.03	*****	0.1260	2.85	1.12	
JAN 22,88	JAN 21,88	*****	*****	*****	*****	*****	*****	*****	*****	
JAN 23,88	JAN 22,88	*****	*****	*****	*****	*****	*****	*****	*****	
JAN 25,88	JAN 24,88	409.0	30.0	*****	4.21	*****	0.0949	2.50	0.80	
FEB 2,88	FEB 1,88	352.0	28.0	*****	4.33	*****	0.0741	2.70	0.41	
FEB 4,88	FEB 3,88	23.0	10.0	*****	4.86	*****	0.0315	LG 0.25	0.33	
FEB 5,88	FEB 4,88	*****	*****	*****	*****	*****	*****	*****	*****	
FEB 6,88	FEB 5,88	*****	*****	*****	*****	*****	*****	*****	*****	
FEB 7,88	FEB 6,88	*****	*****	*****	*****	*****	*****	*****	*****	
FEB 8,88	FEB 7,88	32.0	!IS *****	*****	4.14	*****	0.1050	!IS *****	!IS *****	
FEB 10,88	FEB 9,88	155.0	49.5	*****	4.02	*****	0.1260	0.65	1.40	
FEB 12,88	FEB 11,88	610.0	7.0	*****	4.97	*****	0.0254	LG 0.30	0.17	
FEB 13,88	FEB 12,88	368.0	16.0	*****	4.54	*****	0.0480	0.80	0.33	
FEB 15,88	FEB 14,88	407.0	21.5	*****	4.44	*****	0.0589	1.60	0.34	
FEB 16,88	FEB 15,88	278.0	34.0	*****	4.21	*****	0.0912	3.05	0.59	
FEB 17,88	FEB 16,88	25.0	17.5	*****	4.70	*****	0.0425	0.75	0.66	
FEB 20,88	FEB 19,88	1063.0	29.0	*****	4.26	*****	0.0810	2.30	0.47	
FEB 21,88	FEB 20,88	*****	*****	*****	*****	*****	*****	*****	*****	
FEB 23,88	FEB 22,88	582.0	32.0	*****	4.47	*****	0.0638	2.75	1.09	
FEB 27,88	FEB 26,88	*****	*****	*****	*****	*****	*****	*****	*****	
FEB 29,88	FEB 28,88	*****	*****	*****	*****	*****	*****	*****	*****	
MAR 9,88	MAR 8,88	*****	*****	*****	*****	*****	*****	*****	*****	
MAR 10,88	MAR 9,88	372.0	53.0	*****	4.04	*****	0.1270	4.60	0.93	
MAR 13,88	MAR 12,88	193.0	52.5	*****	4.05	*****	0.1250	4.40	1.09	
MAR 14,88	MAR 13,88	*****	*****	*****	*****	*****	*****	*****	*****	
MAR 15,88	MAR 14,88	*****	*****	*****	*****	*****	*****	*****	*****	
MAR 19,88	MAR 18,88	*****	*****	*****	*****	*****	*****	*****	*****	

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : WILMER/DAILY/AEROCHEM

#9A

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REMOVAL DATE		EXPOSURE DATE		CALCIUM	CHLORIDE	MAGNESIUM	POTASSIUM	SODIUM	AMMONIUM	FREE H+			
				MG/L	MG/L	MG/L	MG/L	MG/L	AS N MG/L	LAB MG/L			
JAN 1,88	DEC 31,87	!IS	*****	1.69	!IS	*****	!IS	*****	!IS	*****	1.460	0.1318	
JAN 3,88	JAN 2,88	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	
JAN 4,88	JAN 3,88	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	
JAN 5,88	JAN 4,88		0.46	0.51	0.060	0.025	0.110	0.480	0.074				
JAN 9,88	JAN 8,88		0.50	0.57	0.050	<T	0.020	D	0.350	0.120	D	0.0275	
JAN 12,88	JAN 11,88	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	
JAN 13,88	JAN 12,88		0.92	0.88	0.110	0.130	0.340	1.250	LG	0.2570			
JAN 14,88	JAN 13,88	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	
JAN 15,88	JAN 14,88	!IS	*****	1.04	!IS	*****	!IS	*****	!IS	*****	0.240	0.0132	
JAN 16,88	JAN 15,88	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	
JAN 18,88	JAN 17,88		0.48	1.27	0.065	0.055	0.550	0.320	0.1950				
JAN 19,88	JAN 18,88	<T	0.02	0.18	<W	0.005	D	0.035	0.050	0.260	D	0.0776	
JAN 20,88	JAN 19,88	<T	0.06	0.11	<T	0.005	0.030	0.055	0.080	D	0.0158		
JAN 21,88	JAN 20,88		0.26	0.20	0.025	<T	0.015	0.040	0.340	0.0933			
JAN 22,88	JAN 21,88	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	
JAN 23,88	JAN 22,88	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	
JAN 25,88	JAN 24,88		0.24	0.31	0.035	<T	0.015	0.075	0.450	0.0617			
FEB 2,88	FEB 1,88		0.16	0.04	0.050	0.010	0.030	0.300	0.0468				
FEB 4,88	FEB 3,88		0.10	0.23	<T	0.005	0.030	0.145	!IS	*****	0.0138		
FEB 5,88	FEB 4,88	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	
FEB 6,88	FEB 5,88	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	
FEB 7,88	FEB 6,88	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	
FEB 8,88	FEB 7,88		0.72	!IS	*****	0.075	0.065	0.360	!IS	*****	0.0724		
FEB 10,88	FEB 9,88		0.14	0.66	<T	0.010	<T	0.010	0.095	0.100	0.0955		
FEB 12,88	FEB 11,88	<W	0.02	<T	0.03	<W	0.005	<W	0.005	<T	0.025	0.030	0.0107
FEB 13,88	FEB 12,88	<W	0.02	<T	0.03	<W	0.005	<W	0.005	<T	0.010	0.030	0.0288
FEB 15,88	FEB 14,88	<T	0.10	0.08	<T	0.005	<T	0.020	0.040	0.120	0.0363		
FEB 16,88	FEB 15,88	<T	0.10	0.15	<T	0.020	0.030	0.070	0.430	0.0617			
FEB 17,88	FEB 16,88		0.80	0.38	0.100	<T	0.015	0.190	!IS	*****	0.0200		
FEB 20,88	FEB 19,88	<T	0.02	<W	0.01	<W	0.005	<T	0.010	<T	0.020	0.260	0.0550
FEB 21,88	FEB 20,88	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	
FEB 23,88	FEB 22,88		0.72	0.29	0.095	0.060	0.170	0.700	0.0339				
FEB 27,88	FEB 26,88	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	
FEB 29,88	FEB 28,88	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	
MAR 9,88	MAR 8,88	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	
MAR 10,88	MAR 9,88		0.42	0.31	0.050	0.085							

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : WILMER/DAILY/AEROCHEM

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REMOVAL DATE	EXPOSURE DATE	SAMPLING START/END HR. HR.	PRECIP START/END HR. HR.	SAMPLE TYPE 01-RAIN 02-SNOW 03-COMP/04-OTHER	GAUGE DEPTH(MM)	GAUGE TYPE 01-STD. 02-NIPHER	SAMPLE NUMBER	PROJECT CODE 02-APIOS 03-SPECIAL	SUBPROJECT CODE 01-MOE 03-AES	SAMPLER EFFICI- ENCY (%)	COMMENTS FIELD OFFICE
MAR 20,88	MAR 19,88	700 800	2100 2300	2	4.0	2	60297	2	1	90	
MAR 24,88	MAR 23,88	700 700	1900 2300	1	3.8	2	60298	2	1	146	C NH
MAR 25,88	MAR 24,88	700 700	****	1	0.4	2	60299	2	1	****	EK
MAR 26,88	MAR 25,88	700 700	****	1	16.2	2	60300	2	1	49	N
MAR 27,88	MAR 26,88	700 800	****	1	2.2	2	60302	2	1	144	N
APR 3,88	APR 2,88	800 800	****	1	3.0	2	60303	2	1	119	
APR 4,88	APR 3,88	800 700	1430 2200	1	19.8	2	60304	2	1	94	
APR 5,88	APR 4,88	700 700	1415 1630	1	0.8	2	60305	2	1	103	
APR 8,88	APR 7,88	700 700	****	1	1.8	2	60306	2	1	136	N
APR 9,88	APR 8,88	700 800	****	1	1.0	2	60307	2	1	123	NCM
APR 13,88	APR 12,88	700 700	****	1	0.4	1	60308	2	1	****	EK
APR 14,88	APR 13,88	700 700	****	1	2.8	1	60309	2	1	104	
APR 15,88	APR 14,88	700 700	1100 1430	1	4.0	1	60310	2	1	98	D
APR 16,88	APR 15,88	700 700	****	2	0.4	1	60311	2	1	****	EK
APR 17,88	APR 16,88	700 800	****	1	0.2	1	60312	2	1	****	EK
APR 18,88	APR 17,88	800 700	****	1	0.8	1	60313	2	1	99	
APR 21,88	APR 20,88	700 700	2030 2430	2	6.8	1	60314	2	1	95	
APR 24,88	APR 23,88	800 800	2300 2320	1	2.0	1	60315	2	1	134	D N
APR 27,88	APR 26,88	700 700	1145 1300	1	4.2	1	60316	2	1	98	
APR 28,88	APR 27,88	700 700	2100 2300	1	7.2	1	60317	2	1	90	D
APR 29,88	APR 28,88	700 700	2200 2340	1	4.4	1	60318	2	1	81	
APR 30,88	APR 29,88	700 800	900 2030	1	6.4	1	60319	2	1	78	
MAY 1,88	APR 30,88	800 800	830 1100	1	0.6	1	60320	2	1	64	
MAY 10,88	MAY 9,88	700 700	1645 2000	1	0.6	1	60321	2	1	80	
MAY 13,88	MAY 12,88	700 700	600 700	1	0.2	1	60322	2	1	****	EK
MAY 14,88	MAY 13,88	700 700	700 1500	1	8.0	1	60323	2	1	99	
MAY 16,88	MAY 15,88	800 700	****	1	2.4	1	60324	2	1	83	D
MAY 17,88	MAY 16,88	700 700	****	1	2.4	1	60325	2	1	91	
MAY 19,88	MAY 18,88	800 800	1630 1900	1	2.2	1	60327	2	1	86	
MAY 20,88	MAY 19,88	800 800	1245 1700	1	32.4	1	60328	2	1	77	NCM
MAY 21,88	MAY 20,88	800 800	800 1400	1	2.8	1	60330	2	1	72	HCM
MAY 23,88	MAY 22,88	800 800	****	1	0.2	1	60331	2	1	****	EK
MAY 26,88	MAY 25,88	800 800	****	1	0.2	1	60332	2	1	****	EK
MAY 27,88	MAY 26,88	800 800	****	1	0.2	1	60333	2	1	****	EK
MAY 31,88	MAY 30,88	800 700	****	1	0.2	1	60334	2	1	****	EK
JUN 1,88	MAY 31,88	700 700	****	1	3.6	1	60335	2	1	104	C
JUN 2,88	JUN 1,88	700 700	700 1130	1	3.8	1	60336	2	1	90	
JUN 3,88	JUN 2,88	700 700	2230 2300	1	0.6	1	60337	2	1	38	N
JUN 4,88	JUN 3,88	700 700	1200 1230	1	2.2	1	60338	2	1	89	
JUN 23,88	JUN 22,88	700 700	2000 2300	1	6.0	1	60340	2	1	97	A

ONTARIO MINISTRY OF THE ENVIRONMENT
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REMOVAL DATE	EXPOSURE DATE	VOLUME ML	CONDUCT. UMHO/CM	PH FIELD	PH LAB	TOTAL H+ TO PH8.3 MG/L	TOTAL H+ GRAN MG/L	SULPHATE MG/L	NITRATE AS N MG/L
MAR 20,88	MAR 19,88	233.0	19.0	*****	4.43	*****	0.0590	<T 0.20	0.60
MAR 24,88	MAR 23,88	356.0	48.5	*****	UG 5.40	*****	0.0363	7.65	1.93
MAR 25,88	MAR 24,88	*****	*****	*****	*****	*****	*****	*****	*****
MAR 26,88	MAR 25,88	517.0	16.5	*****	4.77	*****	0.0412	1.95	0.45
MAR 27,88	MAR 26,88	204.0	42.0	*****	4.11	*****	0.1070	2.35	1.17
APR 3,88	APR 2,88	230.0	73.0	*****	3.80	*****	0.1930	6.00	1.16
APR 4,88	APR 3,88	1197.0	25.5	*****	4.33	*****	0.0699	2.20	0.28
APR 5,88	APR 4,88	53.0	81.5	*****	3.90	*****	0.1800	7.60	1.49
APR 8,88	APR 7,88	158.0	55.0	*****	4.00	*****	0.1380	5.05	0.75
APR 9,88	APR 8,88	79.0	5.0	*****	5.15	*****	0.0270	0.40	LG 0.06
APR 13,88	APR 12,88	*****	*****	*****	*****	*****	*****	*****	*****
APR 14,88	APR 13,88	188.0	83.5	*****	3.83	*****	0.1960	6.10	1.85
APR 15,88	APR 14,88	252.0	> 100.0	*****	3.67	*****	UG 0.2860	9.95	UG 3.45
APR 16,88	APR 15,88	*****	*****	*****	*****	*****	*****	*****	*****
APR 17,88	APR 16,88	*****	*****	*****	*****	*****	*****	*****	*****
APR 18,88	APR 17,88	51.0	60.5	*****	UG 7.64	*****	LG 0.0154	7.75	1.77
APR 21,88	APR 20,88	417.0	12.0	*****	5.18	*****	0.0304	1.25	0.67
APR 24,88	APR 23,88	172.0	50.5	*****	4.17	*****	0.1090	5.45	1.22
APR 27,88	APR 26,88	265.0	29.0	*****	4.54	*****	0.0576	3.30	0.77
APR 28,88	APR 27,88	419.0	21.0	*****	4.59	*****	0.0534	2.10	0.46
APR 29,88	APR 28,88	231.0	30.0	*****	4.31	*****	0.0785	1.70	0.79
APR 30,88	APR 29,88	324.0	15.5	*****	4.70	*****	0.0424	1.80	0.26
MAY 1,88	APR 30,88	25.0	11.5	*****	4.76	*****	0.0399	1.45	0.16
MAY 10,88	MAY 9,88	31.0	!IS *****	*****	3.65	*****	0.3250	!IS *****	!IS *****
MAY 13,88	MAY 12,88	*****	*****	*****	*****	*****	*****	*****	*****
MAY 14,88	MAY 13,88	512.0	48.0	*****	4.31	*****	0.0896	6.35	1.34
MAY 16,88	MAY 15,88	128.0	94.0	*****	3.78	*****	0.2260	10.10	1.34
MAY 17,88	MAY 16,88	140.0	46.5	*****	4.10	*****	0.1160	4.85	0.64
MAY 19,88	MAY 18,88	122.0	54.0	*****	4.01	*****	0.1370	4.85	0.88
MAY 20,88	MAY 19,88	1618.0	5.5	*****	5.12	*****	0.0256	LG 0.45	0.08
MAY 21,88	MAY 20,88	130.0	3.5	*****	UG 6.26	*****	0.0153	LG 0.35	0.10
MAY 23,88	MAY 22,88	*****	*****	*****	*****	*****	*****	*****	*****
MAY 26,88	MAY 25,88	*****	*****	*****	*****	*****	*****	*****	*****
MAY 27,88	MAY 26,88	*****	!RE *****	*****	!RE *****	*****	!RE *****	!RE *****	!RE *****
MAY 31,88	MAY 30,88	*****	!RE *****	*****	!RE *****	*****	!RE *****	!RE *****	!RE *****
JUN 1,88	MAY 31,88	242.0	35.5	*****	4.18	*****	0.0848	6.45	0.63
JUN 2,88	JUN 1,88	221.0	32.0	*****	4.13	*****	0.0950	4.75	0.29
JUN 3,88	JUN 2,88	15.0	6.0	*****	!IS *****	*****	!IS *****	LG 0.50	0.14
JUN 4,88	JUN 3,88	126.0	9.0	*****	4.64	*****	0.0356	1.10	0.35
JUN 23,88	JUN 22,88	375.0	22.0	*****	4.45	*****	0.0511	3.55	0.63

ONTARIO MINISTRY OF THE ENVIRONMENT
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REMOVAL DATE	EXPOSURE DATE	CALCIUM MG/L	CHLORIDE MG/L	MAGNESIM MG/L	POTASSIM MG/L	SODIUM MG/L	AMMONIUM AS N MG/L	FREE H+ LAB MG/L
MAR 20,88	MAR 19,88	<T 0.08	0.17	<T 0.010	<W 0.005	0.040	0.060	0.0372
MAR 24,88	MAR 23,88	2.30	0.70	UG 0.480	0.125	0.430	1.810	UG 0.0040
MAR 25,88	MAR 24,88	*****	*****	*****	*****	*****	*****	*****
MAR 26,88	MAR 25,88	0.44	0.16	0.070	<T 0.020	0.130	0.340	0.0170
MAR 27,88	MAR 26,88	0.34	0.10	0.040	0.025	0.030	0.490	0.0776
APR 3,88	APR 2,88	0.18	0.42	0.045	0.030	0.215	0.530	0.1585
APR 4,88	APR 3,88	<T 0.04	0.09	<T 0.010	<T 0.010	0.045	0.200	0.0468
APR 5,88	APR 4,88	0.14	0.39	0.030	<T 0.020	0.035	1.675	0.1259
APR 8,88	APR 7,88	0.28	0.17	0.040	0.030	0.065	0.450	0.1000
APR 9,88	APR 8,88	<T 0.02	<W 0.01	<T 0.005	<T 0.015	<T 0.010	<W 0.005	0.0071
APR 13,88	APR 12,88	*****	*****	*****	*****	*****	*****	*****
APR 14,88	APR 13,88	0.82	0.31	0.105	0.035	0.105	0.675	0.1479
APR 15,88	APR 14,88	1.72	0.93	0.260	0.075	0.290	1.500	0.2138
APR 16,88	APR 15,88	*****	*****	*****	*****	*****	*****	*****
APR 17,88	APR 16,88	*****	*****	*****	*****	*****	*****	*****
APR 18,88	APR 17,88	UG 4.42	0.53	UG 1.070	-UG 0.300	D 0.270	1.750	UG 0.0000
APR 21,88	APR 20,88	0.48	0.06	0.080	<T 0.020	<T 0.025	0.475	0.0066
APR 24,88	APR 23,88	0.68	0.17	0.110	0.060	0.090	1.075	0.0676
APR 27,88	APR 26,88	0.48	0.15	0.095	0.035	0.025	0.800	0.0288
APR 28,88	APR 27,88	0.24	0.08	0.035	<T 0.015	<T 0.020	0.350	0.0257
APR 29,88	APR 28,88	0.12	0.10	<T 0.020	<T 0.025	0.040	0.325	0.0490
APR 30,88	APR 29,88	<T 0.08	0.06	<T 0.015	<T 0.015	0.035	0.325	0.0200
MAY 1,88	APR 30,88	0.12	0.07	0.030	0.030	0.045	0.100	0.0174
MAY 10,88	MAY 9,88	UG 3.20	!IS *****	0.410	UG 0.340	UG 0.380	1.700	0.2239
MAY 13,88	MAY 12,88	*****	*****	*****	*****	*****	*****	*****
MAY 14,88	MAY 13,88	1.48	0.25	0.200	0.100	0.065	1.150	0.0490
MAY 16,88	MAY 15,88	0.90	0.30	0.105	0.155	0.085	1.100	0.1660
MAY 17,88	MAY 16,88	0.30	0.12	0.035	0.045	0.045	0.475	0.0794
MAY 19,88	MAY 18,88	0.40	0.14	0.075	<T 0.020	0.030	0.350	0.0977
MAY 20,88	MAY 19,88	<W 0.02	<T 0.03	<W 0.005	<T 0.005	<T 0.010	LG 0.050	0.0076
MAY 21,88	MAY 20,88	0.12	<T 0.04	<T 0.010	0.025	0.025	LG 0.050	UG 0.0005
MAY 23,88	MAY 22,88	*****	*****	*****	*****	*****	*****	*****
MAY 26,88	MAY 25,88	*****	*****	*****	*****	*****	*****	*****
MAY 27,88	MAY 26,88	!IS *****	!RE *****	!IS *****	!IS *****	!IS *****	!RE *****	!RE *****
MAY 31,88	MAY 30,88	!IS *****	!RE *****	!IS *****	!IS *****	!IS *****	!RE *****	!RE *****
JUN 1,88	MAY 31,88	1.16	0.14	0.220	0.185	0.080	0.708	0.0490
JUN 2,88	JUN 1,88	0.18	0.10	0.030	0.040	0.060	0.652	0.0631
JUN 3,88	JUN 2,88	0.92	0.06	0.115	0.025	0.045	0.262	!IS *****
JUN 4,88	JUN 3,88	0.24	<T 0.04	0.040	<T 0.015	<T 0.020	0.218	0.0166
JUN 23,88	JUN 22,88	0.64	0.13	0.110	0.040	0.040	0.828	0.0229

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REMOVAL DATE	EXPOSURE DATE	SAMPLING START/END HR. HR.	PRECIP START/END HR. HR.	SAMPLE TYPE 01-RAIN 02-SNOW 03-COMP/04-OTHER	GAUGE DEPTH(MM)	GAUGE TYPE 01-STD. 02-NIPHER	SAMPLE NUMBER	PROJECT CODE 02-APIOS 03-SPECIAL	SUBPROJECT CODE 01-MOE 03-AES	SAMPLER EFFICI- ENCY (%)	COMMENTS FIELD OFFICE
JUN 25,88	JUN 24,88	700 800	**** ****	1	2.0	1	60341	2	1	92	J
JUN 26,88	JUN 25,88	800 800	1000 1045	1	6.4	1	60342	2	1	99	
JUN 27,88	JUN 26,88	800 700	2100 2330	1	0.6	1	60343	2	1	80	
JUN 29,88	JUN 28,88	700 700	1100 1430	1	4.4	1	60344	2	1	98	J
JUN 30,88	JUN 29,88	700 700	1400 1530	1	3.0	1	60345	2	1	98	JM
JUL 1,88	JUN 30,88	700 800	**** ****	1	3.4	1	60346	2	1	89	J
JUL 2,88	JUL 1,88	800 800	1430 1500	1	1.0	1	60347	2	1	49	N
JUL 12,88	JUL 11,88	700 700	1315 1330	1	1.0	1	60348	2	1	104	
JUL 15,88	JUL 14,88	700 700	745 900	1	19.6	1	60349	2	1	103	
JUL 16,88	JUL 15,88	700 800	**** ****	1	0.2	1	60351	2	1	****	EK
JUL 18,88	JUL 16,88	800 700	**** ****	1	11.8	1	60352	2	1	U 102	I Z
JUL 19,88	JUL 18,88	700 700	**** ****	1	0.4	1	60353	2	1	****	EK
JUL 20,88	JUL 19,88	700 700	**** ****	1	0.2	1	60354	2	1	****	EK
JUL 21,88	JUL 20,88	700 700	**** ****	1	0.2	1	60355	2	1	****	EK
JUL 22,88	JUL 21,88	700 700	700 915	1	1.0	1	60356	2	1	84	
JUL 23,88	JUL 22,88	700 800	**** ****	1	0.2	1	60357	2	1	****	EK
JUL 24,88	JUL 23,88	800 800	**** ****	1	8.4	1	60358	2	1	103	HM
JUL 25,88	JUL 24,88	800 700	930 1000	1	0.6	1	60359	2	1	85	
JUL 26,88	JUL 25,88	700 700	**** ****	1	2.2	1	60360	2	1	95	
JUL 27,88	JUL 26,88	700 700	1345 1415	1	8.2	1	60361	2	1	99	
AUG 7,88	AUG 6,88	700 800	1030 1230	1	2.4	1	60363	2	1	105	
AUG 15,88	AUG 14,88	800 700	930 945	1	0.2	1	60364	2	1	****	EK
AUG 16,88	AUG 15,88	700 700	1930 2030	1	0.8	1	60365	2	1	81	
AUG 18,88	AUG 17,88	700 700	1230 1400	1	1.6	1	60366	2	1	110	HC
AUG 21,88	AUG 20,88	800 800	1600 2100	1	8.4	1	60367	2	1	102	
AUG 24,88	AUG 23,88	700 700	1800 2300	1	9.2	1	60368	2	1	89	
AUG 25,88	AUG 24,88	700 700	2030 2300	1	13.2	1	60369	2	1	98	
AUG 26,88	AUG 25,88	700 700	1030 1100	1	3.8	1	60370	2	1	97	
AUG 27,88	AUG 26,88	700 800	1630 1800	1	14.6	1	60371	2	1	98	H
AUG 28,88	AUG 27,88	800 800	700 800	1	2.2	1	60372	2	1	97	
AUG 29,88	AUG 28,88	800 700	800 1500	1	6.4	1	60373	2	1	100	
AUG 30,88	AUG 29,88	700 700	**** ****	1	0.2	1	60374	2	1	****	EK
AUG 31,88	AUG 30,88	700 700	1400 1500	1	1.4	1	60375	2	1	88	X
SEP 4,88	SEP 3,88	800 800	2300 800	1	2.2	1	60376	2	1	83	Q X
SEP 5,88	SEP 4,88	800 800	800 800	1	3.2	1	60377	2	1	****	Q X
SEP 6,88	SEP 5,88	800 700	800 830	1	0.2	1	60378	2	1	****	EK
SEP 13,88	SEP 12,88	700 700	**** ****	1	5.6	1	60379	2	1	99	Q
SEP 15,88	SEP 14,88	700 700	**** ****	1	0.4	1	60380	2	1	****	EK
SEP 17,88	SEP 16,88	700 800	**** ****	1	2.4	1	60381	2	1	82	Q X
SEP 18,88	SEP 17,88	800 800	800 1300	1	0.8	1	60382	2	1	72	Q X

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REMOVAL DATE	EXPOSURE DATE	SAMPLING START/END HR. HR.	PRECIP START/END HR. HR.	SAMPLE TYPE 01-RAIN 02-SNOW 03-COMP/04-OTHER	GAUGE DEPTH(MM)	GAUGE TYPE 01-STD. 02-NIPHER	SAMPLE NUMBER	PROJECT CODE 02-APIOS 03-SPECIAL	SUBPROJECT CODE 01-MOE 03-AES	SAMPLER EFFICI- ENCY (%)	COMMENTS FIELD OFFICE		
SEP 20,88	SEP 19,88	700 700	****	****	1	0.2	1	60383	2	1	****	EK	
SEP 21,88	SEP 20,88	700 700	900 1000	1	6.6	1	60384	2	1	104			
SEP 22,88	SEP 21,88	700 700	****	****	4	0.2	1	60385	2	1	****	EK	
SEP 23,88	SEP 22,88	700 700	100 700	1	****	1	60386	2	1	12		N	
SEP 24,88	SEP 23,88	700 700	700 900	1	1.2	1	60387	2	1	54			
SEP 28,88	SEP 27,88	700 700	1600 2000	1	7.0	1	60388	2	1	97	C		
OCT 2,88	OCT 1,88	800 800	700 800	1	13.2	1	60389	2	1	101	Q		
OCT 3,88	OCT 2,88	800 700	800 1100	1	18.6	1	60390	2	1	88		N	
OCT 4,88	OCT 3,88	700 700	****	****	1	0.4	1	60391	2	1	****	EK	
OCT 5,88	OCT 4,88	700 700	530 700	1	8.4	1	60392	2	1	104			
OCT 6,88	OCT 5,88	700 700	700 900	1	6.2	1	60393	2	1	83			
OCT 7,88	OCT 6,88	700 700	****	****	4	0.2	1	60394	2	1	****	EK	
OCT 11,88	OCT 10,88	800 700	1400 2000	1	8.6	1	60395	2	1	37	U	G	
OCT 13,88	OCT 12,88	700 700	****	****	3	0.4	1	60396	2	1	****	EK	
OCT 18,88	OCT 17,88	700 700	400 700	1	11.4	1	60397	2	1	100			
OCT 19,88	OCT 18,88	700 700	700 1000	1	6.4	1	60398	2	1	90			
OCT 22,88	OCT 21,88	700 800	2200 800	3	23.8	1	60399	2	1	82		N	
OCT 23,88	OCT 22,88	800 800	800 1000	3	13.0	1	60400	2	1	28	U	M	
OCT 24,88	OCT 23,88	800 700	2230 700	1	1.8	1	60401	2	1	68		NH	
OCT 25,88	OCT 24,88	700 800	700 1130	1	13.8	1	60402	2	1	92			
OCT 26,88	OCT 25,88	800 700	830 930	1	0.8	1	60403	2	1	60		NH	
OCT 27,88	OCT 26,88	700 800	****	****	1	2.0	1	60404	2	1	55	Q	
OCT 28,88	OCT 27,88	800 700	530 700	1	1.8	1	60405	2	1	91			
OCT 29,88	OCT 28,88	700 800	700 1100	1	8.8	1	60406	2	1	90			
NOV 2,88	NOV 1,88	700 700	1900 2200	1	6.4	1	60407	2	1	90			
NOV 3,88	NOV 2,88	700 700	700 1100	1	9.0	1	60408	2	1	96			
NOV 5,88	NOV 4,88	700 800	****	****	1	1.4	1	60409	2	1	84		
NOV 6,88	NOV 5,88	800 800	1700 1930	1	12.4	1	60410	2	1	93			
NOV 7,88	NOV 6,88	800 700	1700 1800	1	6.4	1	60411	2	1	89			
NOV 8,88	NOV 7,88	700 800	****	****	1	0.4	1	60412	2	1	****	EK	
NOV 9,88	NOV 8,88	800 700	1100 1400	1	9.0	1	60413	2	1	91		C	
NOV 10,88	NOV 9,88	700 700	1100 1130	1	0.6	1	60414	2	1	70			
NOV 11,88	NOV 10,88	700 700	1400 1800	1	4.2	1	60415	2	1	90			
NOV 13,88	NOV 12,88	800 800	****	****	1	2.8	1	60416	2	1	91		
NOV 14,88	NOV 13,88	800 700	800 2000	1	6.0	1	60417	2	1	89			
NOV 17,88	NOV 16,88	700 700	1530 2100	1	5.4	1	60418	2	1	92			
NOV 18,88	NOV 17,88	700 700	1730 1900	1	0.6	1	60419	2	1	78			
NOV 20,88	NOV 19,88	800 800	****	****	1	1.8	1	60420	2	1	78		
NOV 21,88	NOV 20,88	800 700	1800 2100	3	16.6	1	60421	2	1	79		NH	
NOV 28,88	NOV 27,88	800 700	930 1100	1	5.6	1	60422	2	1	91			

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : WILMER/DAILY/AEROCHEM

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REMOVAL DATE	EXPOSURE DATE	VOLUME ML	CONDUCT. UMHO/CM	PH FIELD	PH LAB	TOTAL H+ TO PH8.3 MG/L	TOTAL H+ GRAN MG/L	SULPHATE MG/L	NITRATE AS N MG/L
SEP 20,88	SEP 19,88	*****	*****	*****	*****	*****	*****	*****	*****
SEP 21,88	SEP 20,88	444.0	29.5	*****	4.26	*****	0.0745	2.85	0.32
SEP 22,88	SEP 21,88	*****	*****	*****	*****	*****	*****	*****	*****
SEP 23,88	SEP 22,88	908.0	19.0	*****	4.45	*****	0.0580	1.55	0.24
SEP 24,88	SEP 23,88	42.0	62.0	*****	4.00	*****	0.1290	5.75	1.37
SEP 28,88	SEP 27,88	437.0	55.5	*****	4.28	*****	0.0848	7.60	1.66
OCT 2,88	OCT 1,88	862.0	26.0	*****	4.30	*****	0.0726	2.50	0.27
OCT 3,88	OCT 2,88	1057.0	23.5	*****	4.36	*****	0.0680	D 2.15	0.21
OCT 4,88	OCT 3,88	*****	*****	*****	*****	*****	*****	*****	*****
OCT 5,88	OCT 4,88	561.0	D 30.0	*****	D 4.25	*****	D 0.0822	1.55	0.69
OCT 6,88	OCT 5,88	332.0	16.0	*****	4.55	*****	0.0504	0.70	0.42
OCT 7,88	OCT 6,88	*****	*****	*****	*****	*****	*****	*****	*****
OCT 11,88	OCT 10,88	204.0	25.0	*****	4.51	*****	0.0591	4.25	0.64
OCT 13,88	OCT 12,88	*****	*****	*****	*****	*****	*****	*****	*****
OCT 18,88	OCT 17,88	732.0	25.5	*****	4.29	*****	0.0782	2.90	0.51
OCT 19,88	OCT 18,88	371.0	19.0	*****	4.45	*****	0.0621	2.40	0.33
OCT 22,88	OCT 21,88	1258.0	12.0	*****	4.57	*****	0.0470	1.00	0.33
OCT 23,88	OCT 22,88	239.0	LG 2.0	*****	5.39	*****	0.0221	<T 0.25	LG 0.06
OCT 24,88	OCT 23,88	79.0	42.0	*****	4.03	*****	0.1240	2.55	1.15
OCT 25,88	OCT 24,88	816.0	19.5	*****	4.46	*****	0.0584	2.35	0.45
OCT 26,88	OCT 25,88	31.0	8.5	*****	UG 7.18	*****	0.0195	1.50	0.38
OCT 27,88	OCT 26,88	71.0	13.0	*****	UG 7.00	*****	0.0188	1.65	0.49
OCT 28,88	OCT 27,88	105.0	32.5	*****	4.23	*****	0.0768	3.40	0.66
OCT 29,88	OCT 28,88	509.0	8.0	*****	4.77	*****	0.0378	0.60	0.16
NOV 2,88	NOV 1,88	372.0	36.0	*****	4.08	*****	0.0996	1.95	0.85
NOV 3,88	NOV 2,88	558.0	27.5	*****	4.22	*****	0.0745	2.37	0.40
NOV 5,88	NOV 4,88	76.0	!IR *****	*****	4.26	*****	0.0658	1.55	0.51
NOV 6,88	NOV 5,88	747.0	17.3	*****	4.39	*****	0.0548	0.80	0.39
NOV 7,88	NOV 6,88	366.0	31.5	*****	4.25	*****	0.0866	1.45	0.63
NOV 8,88	NOV 7,88	*****	*****	*****	*****	*****	*****	*****	*****
NOV 9,88	NOV 8,88	528.0	7.5	*****	4.21	*****	0.0754	1.80	0.53
NOV 10,88	NOV 9,88	27.0	!IS *****	*****	4.33	*****	0.0610	!IS *****	!IS *****
NOV 11,88	NOV 10,88	245.0	34.5	*****	4.18	*****	0.0880	4.05	!CR *****
NOV 13,88	NOV 12,88	164.0	48.0	*****	4.01	*****	0.1230	3.10	1.31
NOV 14,88	NOV 13,88	343.0	24.0	*****	4.29	*****	0.0735	3.00	!CR *****
NOV 17,88	NOV 16,88	321.0	21.5	*****	4.47	*****	0.0543	3.60	0.54
NOV 18,88	NOV 17,88	30.0	18.0	*****	4.71	*****	0.0420	1.95	0.89
NOV 20,88	NOV 19,88	90.0	37.0	4.06	!IS *****	*****	!IS *****	2.30	0.99
NOV 21,88	NOV 20,88	846.0	10.0	4.58	4.59	*****	0.0430	0.90	<T 0.05
NOV 28,88	NOV 27,88	328.0	36.0	4.06	4.14	*****	0.0986	3.50	0.75

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : WILMER/DAILY/AEROCHEM

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REMOVAL DATE	EXPOSURE DATE	CALCIUM MG/L	CHLORIDE MG/L	MAGNESIUM MG/L	POTASSIUM MG/L	SODIUM MG/L	AMMONIUM AS N MG/L	FREE H+ LAB MG/L
SEP 20,88	SEP 19,88	*****	*****	*****	*****	*****	*****	*****
SEP 21,88	SEP 20,88	0.24	0.25	0.030	<T 0.020	0.080	0.146	0.0550
SEP 22,88	SEP 21,88	*****	*****	*****	*****	*****	*****	*****
SEP 23,88	SEP 22,88	<T 0.06	0.05	<W 0.005	<W 0.005	<W 0.005	0.146	0.0355
SEP 24,88	SEP 23,88	0.72	0.15	0.090	0.060	0.110	1.060	0.1000
SEP 28,88	SEP 27,88	2.52	0.32	0.385	0.090	0.055	1.060	0.0525
OCT 2,88	OCT 1,88	<T 0.08	0.11	<T 0.010	<T 0.010	0.035	0.290	0.0501
OCT 3,88	OCT 2,88	<T 0.06	0.05	<W 0.005	<W 0.005	<T 0.015	D 0.156	0.0437
OCT 4,88	OCT 3,88	*****	*****	*****	*****	*****	*****	*****
OCT 5,88	OCT 4,88	<T 0.06	0.06	<T 0.005	<T 0.010	<W 0.005	0.296	D 0.0562
OCT 6,88	OCT 5,88	0.10	<T 0.03	<T 0.005	<W 0.005	<W 0.005	0.116	0.0282
OCT 7,88	OCT 6,88	*****	*****	*****	*****	*****	*****	*****
OCT 11,88	OCT 10,88	0.32	<T 0.05	0.070	0.040	<T 0.020	1.110	0.0309
OCT 13,88	OCT 12,88	*****	*****	*****	*****	*****	*****	*****
OCT 18,88	OCT 17,88	0.30	0.11	0.055	0.035	0.065	0.236	0.0513
OCT 19,88	OCT 18,88	0.16	<T 0.03	0.030	0.045	0.040	0.366	0.0355
OCT 22,88	OCT 21,88	<T 0.04	<T 0.03	<T 0.010	<W 0.005	0.055	0.076	0.0269
OCT 23,88	OCT 22,88	<T 0.02	<W 0.01	<W 0.005	<W 0.005	<W 0.005	<T 0.020	0.0041
OCT 24,88	OCT 23,88	0.14	0.10	<T 0.020	<T 0.025	<T 0.015	0.290	0.0933
OCT 25,88	OCT 24,88	0.16	<T 0.02	D 0.030	0.030	0.165	0.376	0.0347
OCT 26,88	OCT 25,88	0.54	0.39	0.080	0.170	UG 0.260	0.506	UG 0.0001
OCT 27,88	OCT 26,88	1.54	0.32	0.115	0.110	0.130	0.400	UG 0.0001
OCT 28,88	OCT 27,88	D 0.82	<W 0.01	D 0.115	0.055	0.070	0.176	0.0589
OCT 29,88	OCT 28,88	<T 0.02	0.08	<W 0.005	<T 0.010	<T 0.005	LG 0.050	0.0170
NOV 2,88	NOV 1,88	0.16	0.53	<T 0.020	0.025	0.035	0.280	0.0832
NOV 3,88	NOV 2,88	0.10	0.20	<T 0.015	<T 0.015	<T 0.020	0.166	0.0603
NOV 5,88	NOV 4,88	0.14	1.13	0.080	0.045	UG 0.635	0.096	0.0550
NOV 6,88	NOV 5,88	<T 0.06	<W 0.01	<T 0.010	<T 0.015	0.040	0.080	0.0407
NOV 7,88	NOV 6,88	<T 0.04	<W 0.01	<T 0.005	<T 0.015	<T 0.010	0.246	0.0562
NOV 8,88	NOV 7,88	*****	*****	*****	*****	*****	*****	*****
NOV 9,88	NOV 8,88	0.12	<W 0.01	<T 0.010	<T 0.010	<T 0.015	0.266	0.0617
NOV 10,88	NOV 9,88	0.50	!IS *****	0.040	0.030	0.065	0.030	0.0468
NOV 11,88	NOV 10,88	0.74	0.45	0.070	0.055	0.225	0.270	0.0661
NOV 13,88	NOV 12,88	0.46	1.12	0.115	0.070	UG 0.685	0.380	0.0977
NOV 14,88	NOV 13,88	0.12	0.20	<T 0.025	<T 0.020	0.100	0.300	0.0513
NOV 17,88	NOV 16,88	0.90	0.23	0.055	0.035	0.090	0.250	0.0339
NOV 18,88	NOV 17,88	!IS *****	0.21	!IS *****	!IS *****	!IS *****	0.526	0.0195
NOV 20,88	NOV 19,88	!IS *****	0.07	!IS *****	!IS *****	!IS *****	0.366	!IS *****
NOV 21,88	NOV 20,88	<W 0.02	<T 0.05	<W 0.005	<T 0.005	<T 0.005	0.070	0.0257
NOV 28,88	NOV 27,88	0.28	0.27	0.045	0.040	0.140	0.346	0.0724

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : WILMER/DAILY/AEROCHEM

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REMOVAL DATE	EXPOSURE DATE	SAMPLING START/END HR. HR.	PRECIP START/END HR. HR.	SAMPLE TYPE 01-RAIN 02-SNOW 03-COMP/04-OTHER	GAUGE DEPTH(MM)	GAUGE TYPE 01-STD. 02-NIPHER	SAMPLE NUMBER	PROJECT CODE 02-APIOS 03-SPECIAL	SUBPROJECT CODE 01-MOE 03-AES	SAMPLER EFFICI- ENCY (%)	COMMENTS FIELD OFFICE
NOV 29,88	NOV 28,88	700 700	1200 1500	1	1.2	2	60423	2	1	91	
DEC 1,88	NOV 30,88	700 700	1030 1530	1	0.6	2	60424	2	1	75	
DEC 5,88	DEC 4,88	800 700	1400 1530	2	0.4	2	60425	2	1	35	N
DEC 11,88	DEC 10,88	800 800	****	2	0.4	2	60426	2	1	****	EK
DEC 14,88	DEC 13,88	700 700	1300 1700	2	2.2	2	60427	2	1	79	Q C
DEC 15,88	DEC 14,88	700 700	****	3	8.4	2	60428	2	1	80	C
DEC 17,88	DEC 16,88	700 700	****	2	1.4	2	60429	2	1	86	Q C
DEC 18,88	DEC 17,88	700 800	930 1400	2	11.4	2	60430	2	1	79	
DEC 19,88	DEC 18,88	800 700	****	2	0.4	2	60431	2	1	****	EK
DEC 20,88	DEC 19,88	700 700	****	3	2.4	2	60432	2	1	80	A
DEC 21,88	DEC 20,88	700 700	****	1	2.0	2	60433	2	1	151	C N
DEC 23,88	DEC 22,88	700 800	****	3	2.6	2	60434	2	1	76	Q
DEC 24,88	DEC 23,88	800 800	800 930	2	0.6	2	60435	2	1	****	EK
DEC 25,88	DEC 24,88	800 800	1001 1300	3	8.8	2	60436	2	1	78	Q N
DEC 26,88	DEC 25,88	800 800	****	2	0.8	2	60437	2	1	40	Q
DEC 27,88	DEC 26,88	800 800	****	2	3.4	2	60438	2	1	69	Q M
DEC 28,88	DEC 27,88	800 800	800 2100	3	14.2	2	60439	2	1	96	Q
DEC 29,88	DEC 28,88	800 800	1200 1400	2	1.8	2	60440	2	1	59	H
DEC 31,88	DEC 30,88	800 800	****	2	0.4	2	60441	2	1	****	EK

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PART VII

SOUTHWESTERN REGION

DAILY PRECIPITATION CHEMISTRY LISTINGS

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

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STATION NAME : EGBERT/DAILY/AEROCHEM

REMOVAL DATE	EXPOSURE DATE	SAMPLING START/END HR. HR.	PRECIP START/END HR. HR.	SAMPLE TYPE 01-RAIN 02-SNOW 03-COMP/04-OTHER	GAUGE DEPTH(MM)	GAUGE TYPE 01-STD. 02-NIPHER	SAMPLE NUMBER	PROJECT CODE 02-APIOS 03-SPECIAL	SUBPROJECT CODE 01-MOE 03-AES	SAMPLER EFFICI- ENCY (%)	COMMENTS FIELD OFFICE
NOV 29,88	NOV 27,88	835 840	740 2200	3	1.4	2	42145	2	1	75	Y2
NOV 30,88	NOV 29,88	840 834	805 805	1	0.2	1	42146	2	1	****	N
DEC 1,88	NOV 30,88	840 810	805 1400	3	0.7	2	42144	2	1	U 15	CJ
DEC 4,88	DEC 3,88	900 900	1525 1525	3	0.6	2	42123	2	1	U 38	BCFEJ
DEC 9,88	DEC 8,88	840 840	****	2	0.6	2	42138	2	1	U 156	J
DEC 10,88	DEC 9,88	840 850	****	2	1.8	2	42139	2	1	U 139	F
DEC 11,88	DEC 10,88	850 920	920 1345	2	1.0	2	42140	2	1	U 184	J
DEC 13,88	DEC 12,88	829 829	****	2	1.0	2	42141	2	1	U 84	J
DEC 14,88	DEC 13,88	829 840	****	2	****	2	42142	2	1	****	HCM
DEC 15,88	DEC 14,88	840 820	****	1	0.4	2	42143	2	1	269	N
DEC 16,88	DEC 15,88	820 845	****	2	5.5	2	42512	2	1	1012	HC
DEC 18,88	DEC 17,88	848 900	****	2	0.5	2	42514	2	1	59	N
DEC 19,88	DEC 18,88	900 850	****	2	1.1	2	42515	2	1	153	HCM
DEC 20,88	DEC 19,88	850 845	****	1	0.6	2	42516	2	1	104	
DEC 21,88	DEC 20,88	845 845	****	4	0.5	1	42517	2	1	18	E
DEC 23,88	DEC 21,88	845 1015	****	3	7.4	2	42518	2	1	U 90	G
DEC 25,88	DEC 23,88	1015 840	1300 1300	2	4.0	2	42519	2	1	84	C
DEC 26,88	DEC 25,88	840 915	845 845	2	0.4	2	42520	2	1	U 261	G
DEC 27,88	DEC 26,88	915 849	****	3	6.4	2	42521	2	1	77	C
DEC 28,88	DEC 27,88	849 840	800 800	3	7.8	2	42522	2	1	U 100	FC
DEC 29,88	DEC 28,88	840 757	****	2	0.5	2	42523	2	1	U 71	EFC
DEC 30,88	DEC 29,88	910 840	****	2	0.2	2	40026	2	1	****	E

STATION NAME : EGBERT/DAILY/AEROCHEM

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ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : LONGWOODS/DAILY/AEROCHEM

#02

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REMOVAL DATE	EXPOSURE DATE	SAMPLING START/END HR. HR.	PRECIP START/END HR. HR.	SAMPLE TYPE 01-RAIN 02-SNOW 03-COMP/04-OTHER	GAUGE DEPTH(MM)	GAUGE TYPE 01-STD. 02-NIPHER	SAMPLE NUMBER	PROJECT CODE 02-APIOS 03-SPECIAL	SUBPROJECT CODE 01-MOE 03-AES	SAMPLER EFFICI- ENCY (%)	COMMENTS FIELD OFFICE
JAN 14,88	JAN 13,88	800 800	1900 2400	2	4.0	2	64771	2	1	65	C
JAN 18,88	JAN 17,88	800 800	1500 2400	1	11.7	2	64772	2	1	110	
JAN 20,88	JAN 19,88	800 800	2200 100	1	1.8	2	64773	2	1	57	
JAN 22,88	JAN 21,88	800 800	900 1100	2	0.6	2	64774	2	1	64	
JAN 24,88	JAN 23,88	800 800	1600 2300	3	2.8	2	64775	2	1	76	
JAN 26,88	JAN 25,88	800 800	500 900	1	3.8	2	64776	2	1	73	
JAN 27,88	JAN 26,88	800 800	800 1000	1	1.1	2	64777	2	1	89	HCM
FEB 1,88	JAN 31,88	800 800	1300 2100	1	5.5	2	64778	2	1	120	N
FEB 2,88	FEB 1,88	800 800	1900 300	3	9.2	2	64779	2	1	89	
FEB 5,88	FEB 4,88	800 800	*****	2	0.1	2	64781	2	1	****	E N
FEB 9,88	FEB 8,88	800 800	300 800	2	1.9	2	64782	2	1	80	
FEB 12,88	FEB 11,88	1000 1000	1500 2400	2	11.0	2	64783	2	1	34	N
FEB 13,88	FEB 12,88	1000 800	2100 200	2	2.0	2	64784	2	1	20	N
FEB 15,88	FEB 14,88	800 800	100 600	1	2.2	2	64785	2	1	95	
FEB 17,88	FEB 16,88	800 800	2400 600	2	1.2	2	64786	2	1	70	
FEB 20,88	FEB 19,88	800 800	1100 2200	3	11.4	2	64787	2	1	101	
FEB 21,88	FEB 20,88	800 800	1500 1800	3	2.8	2	64790	2	1	45	C N
FEB 25,88	FEB 24,88	800 800	1400 1500	2	1.6	2	64791	2	1	27	C N
FEB 27,88	FEB 26,88	800 900	2400 800	2	1.0	2	64792	2	1	51	
MAR 9,88	MAR 8,88	800 800	500 700	1	1.1	2	64793	2	1	60	
MAR 13,88	MAR 12,88	800 800	1000 1800	1	6.6	2	64794	2	1	102	
MAR 14,88	MAR 13,88	800 800	1500 2400	2	4.8	2	64795	2	1	33	NC
MAR 15,88	MAR 14,88	800 800	1000 1400	2	1.6	2	64796	2	1	60	
MAR 17,88	MAR 16,88	800 800	1000 1100	2	0.8	2	64797	2	1	56	C
MAR 19,88	MAR 18,88	800 800	*****	2	1.0	2	64798	2	1	73	
MAR 20,88	MAR 19,88	800 900	1800 700	2	4.8	2	64799	2	1	41	U F
MAR 24,88	MAR 23,88	800 800	2000 2400	1	1.4	2	64800	2	1	177	C JHM
MAR 25,88	MAR 24,88	800 800	1000 1700	1	1.5	2	64801	2	1	134	N NJ
MAR 26,88	MAR 25,88	800 800	830 1500	1	15.6	2	64802	2	1	105	N
MAR 27,88	MAR 26,88	800 800	1500 1800	1	1.2	2	64805	2	1	171	CD NJH
MAR 30,88	MAR 29,88	800 800	1700 1900	1	1.0	1	64806	2	1	48	C N
APR 3,88	APR 2,88	800 1000	900 1000	1	8.2	1	64807	2	1	97	
APR 4,88	APR 3,88	1000 900	1100 1400	1	4.2	1	64808	2	1	91	
APR 7,88	APR 6,88	800 800	1700 2000	1	10.0	1	64809	2	1	99	D
APR 15,88	APR 14,88	800 800	900 1000	1	3.8	1	64810	2	1	85	
APR 18,88	APR 17,88	800 800	2200 100	1	6.2	1	64811	2	1	101	C J
APR 21,88	APR 20,88	800 800	1700 2200	1	5.6	1	64812	2	1	95	Q JC
APR 23,88	APR 22,88	800 900	100 400	1	4.8	1	64813	2	1	98	Q JHM
APR 24,88	APR 23,88	900 800	600 700	1	0.6	1	64814	2	1	85	
APR 27,88	APR 26,88	800 800	900 1100	1	2.4	1	64815	2	1	94	B J

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : LONGWOODS/DAILY/AEROCHEM

#02

PAGE : 2

REMOVAL DATE	EXPOSURE DATE	VOLUME ML	CONDUCT. UMHO/CM	PH FIELD	PH LAB	TOTAL H+ TO PH8.3 MG/L	TOTAL H+ GRAN MG/L	SULPHATE MG/L	NITRATE AS N MG/L		
JAN 14,88	JAN 13,88	169.0	62.5	UG	7.40	UG	7.77	*****	0.0111	3.50	0.72
JAN 18,88	JAN 17,88	827.0	25.0		4.04	D	4.25	*****	0.0845	2.55	0.54
JAN 20,88	JAN 19,88	66.0	39.0	*****			4.20	*****	0.1100	4.15	1.21
JAN 22,88	JAN 21,88	25.0	9.0	*****		UG	7.40	*****	0.0162	1.50	0.14
JAN 24,88	JAN 23,88	138.0	42.0		3.91		4.12	*****	0.1170	3.65	1.62
JAN 26,88	JAN 25,88	178.0	15.5		4.49		4.93	*****	0.0345	1.20	0.55
JAN 27,88	JAN 26,88	63.0	9.5	*****		UG	6.82	*****	0.0228	LG	0.45
FEB 1,88	JAN 31,88	426.0	30.5		4.09		4.35	*****	0.0693	D	3.30
FEB 2,88	FEB 1,88	527.0	23.5		4.26		4.52	*****	0.0509		2.10
FEB 5,88	FEB 4,88	*****	*****	*****		*****	*****	*****	*****	*****	*****
FEB 9,88	FEB 8,88	98.0	49.5	*****			4.02	*****	0.1160	LG	0.40
FEB 12,88	FEB 11,88	242.0	D 55.0		4.01		4.00	*****	0.1280		2.75
FEB 13,88	FEB 12,88	26.0	!IS *****	*****		D	5.47	*****	0.0236		0.85
FEB 15,88	FEB 14,88	134.0	58.5		4.00		4.05	*****	0.1230		5.15
FEB 17,88	FEB 16,88	54.0	40.0	*****			4.91	*****	0.0410		3.35
FEB 20,88	FEB 19,88	744.0	46.0		3.92		4.12	*****	0.1060		2.95
FEB 21,88	FEB 20,88	81.0	30.0	*****			4.67	*****	0.0513	D	2.90
FEB 25,88	FEB 24,88	28.0	D 71.0	*****		UG	7.93	*****	<T 0.0044	D	2.90
FEB 27,88	FEB 26,88	33.0	36.0	*****		UG	7.20	*****	0.0198		3.25
MAR 9,88	MAR 8,88	43.0	!IS *****	*****		UG	7.34	*****	0.0187	UG	10.10
MAR 13,88	MAR 12,88	434.0	33.0		4.19		4.38	*****	0.0700		3.30
MAR 14,88	MAR 13,88	103.0	21.0		4.69		4.81	*****	0.0401		1.85
MAR 15,88	MAR 14,88	62.0	!IR *****	*****		!IR *****	*****	*****	!IR *****	!IR *****	!IR *****
MAR 17,88	MAR 16,88	29.0	16.0	*****		UG	7.46	*****	0.0124		1.95
MAR 19,88	MAR 18,88	47.0	63.0	*****			4.12	*****	0.1260		4.20
MAR 20,88	MAR 19,88	128.0	12.5	B	5.76	UG	7.46	*****	0.0153		0.80
MAR 24,88	MAR 23,88	159.0	65.0	B	6.60	UG	7.61	*****	0.0113	UG	8.95
MAR 25,88	MAR 24,88	129.0	D 88.5		3.78	D	3.93	*****	D 0.1800	B	8.35
MAR 26,88	MAR 25,88	1054.0	17.0		4.41		4.75	*****	0.0408		2.10
MAR 27,88	MAR 26,88	132.0	27.5	UG	6.05	UG	7.07	*****	0.0227		5.15
MAR 30,88	MAR 29,88	31.0	!IR *****	*****			4.57	*****	0.0777	!IS *****	!IS *****
APR 3,88	APR 2,88	512.0	37.0		4.03		4.28	*****	0.0837		4.30
APR 4,88	APR 3,88	247.0	20.0		4.24		4.52	*****	0.0522		1.55
APR 7,88	APR 6,88	635.0	85.0	LG	3.39		3.73	*****	0.2380		7.70
APR 15,88	APR 14,88	208.0	47.0	UG	6.24	UG	7.14	*****	0.0230		6.90
APR 18,88	APR 17,88	403.0	48.0	UG	6.42	UG	7.33	*****	0.0248		6.85
APR 21,88	APR 20,88	344.0	36.5	UG	6.30	UG	7.45	*****	0.0168		4.10
APR 23,88	APR 22,88	304.0	30.5		4.20		6.31	*****	0.0357		6.15
APR 24,88	APR 23,88	33.0	13.5	*****			5.66	*****	0.0250		3.20
APR 27,88	APR 26,88	146.0	28.0	UG	5.84	UG	6.97	*****	0.0220	D	4.25

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : LONGWOODS/DAILY/AEROCHEM		#02						PAGE : 3	
REMOVAL DATE	EXPOSURE DATE	CALCIUM MG/L	CHLORIDE MG/L	MAGNESIM MG/L	POTASSIM MG/L	SODIUM MG/L	AMMONIUM AS N MG/L	FREE H+ LAB MG/L	
JAN 14,88	JAN 13,88	U 8.86	0.84	U 2.890	0.170	0.365	0.300	UG 0.0000	
JAN 18,88	JAN 17,88	D 0.58	D 0.42	D 0.080	D 0.100	D 0.215	0.190	D 0.0562	
JAN 20,88	JAN 19,88	0.84	D 1.05	D 0.120	B 0.670	D 0.485	0.570	0.0631	
JAN 22,88	JAN 21,88	!IS *****	0.31	!IS *****	!IS *****	!IS *****	0.220	UG 0.0000	
JAN 24,88	JAN 23,88	0.94	0.52	0.150	0.060	0.140	0.720	0.0759	
JAN 26,88	JAN 25,88	0.52	0.46	0.085	0.195	0.135	0.300	0.0117	
JAN 27,88	JAN 26,88	0.56	0.26	0.070	0.030	0.145	0.230	UG 0.0002	
FEB 1,88	JAN 31,88	D 0.48	D 0.79	D 0.090	D 0.110	D 0.485	D 0.550	0.0447	
FEB 2,88	FEB 1,88	0.18	0.18	0.030	0.060	0.120	0.340	0.0302	
FEB 5,88	FEB 4,88	*****	*****	*****	*****	*****	*****	*****	
FEB 9,88	FEB 8,88	0.30	0.67	0.050	0.105	0.290	0.080	0.0955	
FEB 12,88	FEB 11,88	0.30	D 0.55	0.055	D 0.045	D 0.175	0.600	0.1000	
FEB 13,88	FEB 12,88	!IS *****	0.37	!IS *****	!IS *****	!IS *****	0.180	D 0.0034	
FEB 15,88	FEB 14,88	0.92	0.71	0.120	0.120	0.430	0.500	0.0891	
FEB 17,88	FEB 16,88	!IS *****	1.13	!IS *****	!IS *****	!IS *****	0.640	0.0123	
FEB 20,88	FEB 19,88	0.24	0.22	0.030	0.050	0.075	0.460	0.0759	
FEB 21,88	FEB 20,88	D 0.74	0.22	D 0.070	D 0.085	0.095	0.710	0.0214	
FEB 25,88	FEB 24,88	!IS *****	B 2.55	!IS *****	!IS *****	!IS *****	0.610	UG 0.0000	
FEB 27,88	FEB 26,88	!IS *****	1.01	!IS *****	!IS *****	!IS *****	0.630	UG 0.0001	
MAR 9,88	MAR 8,88	!IS *****	UG 3.85	!IS *****	!IS *****	!IS *****	!IR *****	UG 0.0000	
MAR 13,88	MAR 12,88	0.56	0.22	0.070	0.045	0.105	0.410	0.0417	
MAR 14,88	MAR 13,88	0.66	0.15	0.065	0.060	0.070	0.340	0.0155	
MAR 15,88	MAR 14,88	!IR *****	!IR *****	!IR *****	!IR *****	!IR *****	!IR *****	!IR *****	
MAR 17,88	MAR 16,88	!IS *****	0.88	!IS *****	!IS *****	!IS *****	0.440	UG 0.0000	
MAR 19,88	MAR 18,88	1.02	0.86	0.160	0.100	0.165	1.370	0.0759	
MAR 20,88	MAR 19,88	0.92	0.44	0.175	0.055	0.130	0.340	UG 0.0000	
MAR 24,88	MAR 23,88	UG 3.66	1.06	B 0.985	D 0.355	0.715	UG 2.550	UG 0.0000	
MAR 25,88	MAR 24,88	0.80	D 0.70	0.145	0.210	0.285	D 1.920	D 0.1175	
MAR 26,88	MAR 25,88	0.18	0.13	0.035	0.025	0.110	0.290	0.0178	
MAR 27,88	MAR 26,88	D 1.22	D 0.35	D 0.260	D 0.355	0.170	1.430	UG 0.0001	
MAR 30,88	MAR 29,88	!IS *****	0.86	!IS *****	!IS *****	!IS *****	1.600	0.0269	
APR 3,88	APR 2,88	0.84	0.36	0.125	0.095	0.260	0.410	0.0525	
APR 4,88	APR 3,88	0.24	<T 0.04	0.030	0.035	0.040	0.150	0.0302	
APR 7,88	APR 6,88	0.68	0.43	0.085	0.075	0.080	0.990	0.1862	
APR 15,88	APR 14,88	1.36	0.78	0.245	0.320	0.440	UG 3.400	UG 0.0001	
APR 18,88	APR 17,88	1.96	0.36	0.575	D 0.195	D 0.205	UG 2.700	UG 0.0000	
APR 21,88	APR 20,88	2.94	0.24	0.550	0.070	0.170	1.180	UG 0.0000	
APR 23,88	APR 22,88	D 1.66	D 0.25	D 0.310	B 1.040	D 0.190	1.260	0.0005	
APR 24,88	APR 23,88	!IS *****	0.09	!IS *****	!IS *****	!IS *****	0.780	0.0022	
APR 27,88	APR 26,88	0.60	0.12	0.135	B 0.560	0.110	1.920	UG 0.0001	

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : LONGWOODS/DAILY/AEROCHEM

#02

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REMOVAL DATE	EXPOSURE DATE	SAMPLING START/END HR. HR.	PRECIP START/END HR. HR.	SAMPLE TYPE 01-RAIN 02-SNOW 03-COMP/04-OTHER	GAUGE DEPTH(MM)	GAUGE TYPE 01-STD. 02-NIPHER	SAMPLE NUMBER	PROJECT CODE 02-APIOS 03-SPECIAL	SUBPROJECT CODE 01-MOE 03-AES	SAMPLER EFFICI- ENCY (%)	COMMENTS FIELD OFFICE
APR 28,88	APR 27,88	800 800	900 1100	1	3.5	1	64816	2	1	86	B J
APR 29,88	APR 28,88	800 800	1100 1200	1	1.4	1	64817	2	1	85	C
APR 30,88	APR 29,88	800 800	1000 2200	1	1.0	1	64818	2	1	76	
MAY 10,88	MAY 9,88	800 800	1700 1600	1	12.8	1	64819	2	1	119	C JH
MAY 14,88	MAY 13,88	800 800	900 1000	1	0.6	1	64820	2	1	59	
MAY 16,88	MAY 15,88	800 800	1900 2100	1	22.0	1	64821	2	1	134	NJ
MAY 17,88	MAY 16,88	800 800	1200 1300	3	2.8	1	64829	2	1	47	N
MAY 19,88	MAY 18,88	800 800	2000 ****	1	1.2	1	64828	2	1	96	
MAY 20,88	MAY 19,88	800 800	1100 1300	1	1.8	1	64824	2	1	91	
MAY 21,88	MAY 20,88	800 900	200 830	1	5.0	1	64825	2	1	97	
MAY 22,88	MAY 21,88	900 900	1000 1800	1	3.6	1	64826	2	1	94	
JUN 2,88	JUN 1,88	800 800	2100 2300	1	16.2	1	64827	2	1	100	J
JUN 7,88	JUN 6,88	800 800	1600 2100	1	2.8	1	64830	2	1	105	
JUN 23,88	JUN 22,88	800 800	2100 2200	1	2.4	1	64832	2	1	****	CE N
JUN 29,88	JUN 28,88	800 800	2000 2100	1	0.2	1	64833	2	1	148	N
JUL 11,88	JUL 10,88	800 800	2100 2300	1	7.8	1	64834	2	1	98	J
JUL 17,88	JUL 16,88	800 800	1500 1800	1	48.2	1	64836	2	1	71	J
JUL 23,88	JUL 22,88	800 1000	700 1000	1	4.6	1	61586	2	1	28	NH
JUL 28,88	JUL 27,88	800 800	2000 2300	1	7.0	1	64839	2	1	94	J
JUL 31,88	JUL 30,88	800 800	1200 1900	1	7.8	1	64840	2	1	84	J
AUG 1,88	JUL 31,88	800 800	700 1700	1	8.0	1	64841	2	1	99	JH
AUG 3,88	AUG 2,88	800 800	1600 1700	1	10.2	1	64842	2	1	96	B J
AUG 6,88	AUG 5,88	800 800	2030 2200	1	16.0	1	64843	2	1	96	J
AUG 10,88	AUG 9,88	800 800	100 300	1	69.0	1	64846	2	1	118	J
AUG 15,88	AUG 14,88	800 800	100 200	1	41.0	1	64849	2	1	101	J
AUG 18,88	AUG 17,88	800 800	2100 2300	1	16.0	1	64850	2	1	100	J
AUG 24,88	AUG 23,88	800 800	1100 1300	1	13.0	1	64851	2	1	99	J
AUG 25,88	AUG 24,88	800 800	1900 2030	1	1.6	1	64852	2	1	63	
AUG 28,88	AUG 27,88	800 800	**** ****	1	1.1	1	64853	2	1	77	
SEP 3,88	SEP 2,88	800 800	2300 2400	1	1.6	1	64854	2	1	49	N
SEP 4,88	SEP 3,88	800 800	2000 300	1	49.2	1	64855	2	1	103	
SEP 5,88	SEP 4,88	800 800	1200 1600	1	22.0	1	64858	2	1	104	M
SEP 6,88	SEP 5,88	800 800	100 400	1	1.8	1	64859	2	1	68	C HM
SEP 13,88	SEP 12,88	800 800	1500 1600	1	2.6	1	64863	2	1	76	J
SEP 17,88	SEP 16,88	800 800	2300 200	1	3.0	1	64864	2	1	84	
SEP 18,88	SEP 17,88	800 800	2200 200	1	4.0	1	64865	2	1	99	
SEP 20,88	SEP 19,88	800 800	2200 2400	1	1.6	1	64866	2	1	92	C C
SEP 23,88	SEP 22,88	800 800	2100 2300	1	20.0	1	64867	2	1	103	NJ
SEP 28,88	SEP 27,88	800 800	2300 400	1	2.2	1	64868	2	1	73	HCM
OCT 1,88	SEP 30,88	800 800	100 300	1	1.6	1	64869	2	1	62	C

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : LONGWOODS/DAILY/AEROCHEM

#02

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REMOVAL DATE	EXPOSURE DATE	VOLUME ML	CONDUCT. UMHO/CM	PH FIELD	PH LAB	TOTAL H+ TO PH8.3 MG/L	TOTAL H+ GRAN MG/L	SULPHATE MG/L	NITRATE AS N MG/L
APR 28,88	APR 27,88	195.0	69.0	LG	3.48	4.17	*****	0.1290	2.16
APR 29,88	APR 28,88	77.0	30.0	*****	*****	4.92	*****	0.0414	1.02
APR 30,88	APR 29,88	49.0	40.5	D	*****	4.21	*****	0.1030	0.37
MAY 10,88	MAY 9,88	982.0	20.0	*****	4.10	6.50	*****	0.0216	0.57
MAY 14,88	MAY 13,88	23.0	56.5	*****	UG	7.39	*****	0.0181	1.94
MAY 16,88	MAY 15,88	1890.0	29.0	*****	3.87	4.53	*****	0.0710	0.59
MAY 17,88	MAY 16,88	86.0	22.5	*****	UG	7.10	*****	0.0174	0.80
MAY 19,88	MAY 18,88	74.0	17.0	*****	!IS	*****	!IS	1.85	0.44
MAY 20,88	MAY 19,88	106.0	12.0	*****	UG	6.84	*****	0.0165	0.26
MAY 21,88	MAY 20,88	314.0	77.0	*****	*****	3.87	*****	0.1770	1.65
MAY 22,88	MAY 21,88	219.0	82.0	*****	*****	4.00	*****	0.1470	2.13
JUN 2,88	JUN 1,88	1041.0	17.0	*****	3.40	4.80	*****	0.0405	0.28
JUN 7,88	JUN 6,88	189.0	12.5	*****	*****	5.56	*****	0.0208	0.27
JUN 23,88	JUN 22,88	*****	*****	*****	*****	*****	*****	*****	*****
JUN 29,88	JUN 28,88	19.0	12.5	*****	UG	7.24	*****	0.0126	0.30
JUL 11,88	JUL 10,88	491.0	> 100.0	LG	3.01	3.57	*****	0.2840	1.35
JUL 17,88	JUL 16,88	2207.0	D 33.0	*****	3.74	D 4.22	*****	D 0.0814	0.43
JUL 23,88	JUL 22,88	84.0	57.5	*****	*****	4.55	*****	D 0.0579	1.89
JUL 28,88	JUL 27,88	426.0	29.5	*****	3.86	4.36	*****	0.0691	0.63
JUL 31,88	JUL 30,88	425.0	36.0	*****	3.67	4.20	*****	0.0892	0.64
AUG 1,88	JUL 31,88	508.0	17.0	*****	4.30	5.99	*****	0.0241	0.65
AUG 3,88	AUG 2,88	629.0	45.0	*****	3.85	4.28	*****	0.0933	1.18
AUG 6,88	AUG 5,88	990.0	38.0	*****	3.70	4.13	*****	0.1020	0.38
AUG 10,88	AUG 9,88	5227.0	47.0	*****	3.53	3.98	*****	0.1320	0.42
AUG 15,88	AUG 14,88	2675.0	26.5	*****	3.69	4.35	*****	0.0720	0.45
AUG 18,88	AUG 17,88	1032.0	9.5	*****	4.21	5.59	*****	0.0343	0.38
AUG 24,88	AUG 23,88	829.0	24.0	*****	4.02	D 5.07	*****	0.0293	0.79
AUG 25,88	AUG 24,88	65.0	16.0	*****	*****	4.69	*****	0.0451	0.30
AUG 28,88	AUG 27,88	55.0	78.5	*****	*****	3.79	*****	D 0.1990	1.77
SEP 3,88	SEP 2,88	51.0	> 100.0	*****	*****	3.57	*****	0.3150	1.78
SEP 4,88	SEP 3,88	3261.0	26.0	*****	4.01	4.18	*****	0.0890	0.30
SEP 5,88	SEP 4,88	1480.0	15.0	D	4.28	4.39	*****	0.0628	0.16
SEP 6,88	SEP 5,88	79.0	5.5	LG	*****	6.11	*****	0.0200	0.09
SEP 13,88	SEP 12,88	128.0	50.5	D	3.43	3.91	*****	0.1460	0.52
SEP 17,88	SEP 16,88	162.0	86.5	*****	3.41	3.75	*****	0.2470	1.24
SEP 18,88	SEP 17,88	256.0	54.0	*****	3.79	4.12	*****	0.1180	1.30
SEP 20,88	SEP 19,88	95.0	30.0	*****	*****	3.97	*****	0.1570	0.39
SEP 23,88	SEP 22,88	1322.0	23.5	D	3.74	4.27	*****	0.0767	0.36
SEP 28,88	SEP 27,88	104.0	40.5	*****	3.91	3.83	*****	0.1820	1.23
OCT 1,88	SEP 30,88	64.0	53.0	*****	*****	3.94	*****	0.1450	1.63

ONTARIO MINISTRY OF THE ENVIRONMENT
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APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : LONGWOODS/DAILY/AEROCHEM		#02		PAGE : 6							
REMOVAL DATE	EXPOSURE DATE	CALCIUM MG/L	CHLORIDE MG/L	MAGNESIUM MG/L	POTASSIUM MG/L	SODIUM MG/L	AMMONIUM AS N MG/L	FREE H+ LAB MG/L			
APR 28,88	APR 27,88	2.04	D	1.07	0.325	B	0.625	D	0.420	2.250	0.0676
APR 29,88	APR 28,88	0.36	D	0.90	0.055	B	0.525	D	0.505	1.540	0.0120
APR 30,88	APR 29,88	0.54		0.21	0.090		0.065		0.110	0.500	0.0617
MAY 10,88	MAY 9,88	0.84	D	0.45	0.165	D	0.290	B	0.240	0.775	0.0003
MAY 14,88	MAY 13,88	3.40		0.49	0.485	UG	0.365	UG	0.415	2.475	UG 0.0000
MAY 16,88	MAY 15,88	0.56		0.20	0.115		0.080		0.050	0.775	0.0295
MAY 17,88	MAY 16,88	1.38		0.26	0.320		0.250		0.120	0.938	UG 0.0001
MAY 19,88	MAY 18,88	1.32		0.15	0.210		0.195		0.045	0.698	!IS *****
MAY 20,88	MAY 19,88	D 0.84		0.15	0.100		0.260		0.030	0.560	UG 0.0001
MAY 21,88	MAY 20,88	0.42		0.22	0.065		0.035	<T	0.020	0.994	0.1349
MAY 22,88	MAY 21,88	0.66		0.40	0.120		0.140		0.040	2.430	0.1000
JUN 2,88	JUN 1,88	0.34		0.13	0.055		0.075		0.045	0.402	0.0158
JUN 7,88	JUN 6,88	0.52		0.09	0.105		0.055	<T	0.020	0.530	0.0028
JUN 23,88	JUN 22,88	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
JUN 29,88	JUN 28,88	!IS *****	0.17	!IS *****	!IS *****	!IS *****	!IS *****	0.158	UG	0.0001	
JUL 11,88	JUL 10,88	0.48		0.38	0.095		0.065		0.080	0.466	0.2692
JUL 17,88	JUL 16,88	0.26	D	0.20	0.060	D	0.050		0.115	D 0.422	D 0.0603
JUL 23,88	JUL 22,88	D 2.70	B	2.68	0.440	B	0.650	B	1.510	0.602	0.0282
JUL 28,88	JUL 27,88	0.72		0.16	0.145		0.045		0.025	0.586	0.0437
JUL 31,88	JUL 30,88	0.62		0.23	0.090		0.120		0.095	0.420	0.0631
AUG 1,88	JUL 31,88	0.76		0.13	0.115		0.065		0.040	0.702	0.0010
AUG 3,88	AUG 2,88	1.32		0.17	0.240		0.100		0.090	0.956	0.0525
AUG 6,88	AUG 5,88	0.12		0.06	0.030	<T	0.020	<T	0.020	0.276	0.0741
AUG 10,88	AUG 9,88	<T 0.08		0.08	0.025		0.030		0.025	0.340	0.1047
AUG 15,88	AUG 14,88	0.10		0.11	0.035		0.025		0.030	0.600	0.0447
AUG 18,88	AUG 17,88	0.46		0.15	0.075		0.040		0.080	0.380	0.0026
AUG 24,88	AUG 23,88	D 2.18		0.27	0.330		0.085		0.055	0.296	D 0.0085
AUG 25,88	AUG 24,88	D 0.42		0.12	0.085	D	0.090		0.090	0.350	0.0204
AUG 28,88	AUG 27,88	1.60		0.46	0.250		0.255		0.065	1.290	0.1622
SEP 3,88	SEP 2,88	!IS *****	0.78	!IS *****	!IS *****	!IS *****	!IS *****	1.080			0.2692
SEP 4,88	SEP 3,88	<W 0.02		0.06	<W 0.005	<T	0.015	<T	0.005	0.320	0.0661
SEP 5,88	SEP 4,88	<W 0.02	<W 0.01	<W 0.005	<T 0.010	<W 0.005		0.326			0.0407
SEP 6,88	SEP 5,88	0.20		0.24	0.035		0.155		0.150	0.246	0.0008
SEP 13,88	SEP 12,88	0.50		0.25	0.085	D	0.050		0.090	0.250	0.1230
SEP 17,88	SEP 16,88	0.78		0.31	0.120		0.065		0.065	0.856	0.1778
SEP 18,88	SEP 17,88	0.82		0.37	0.185		0.085		0.060	1.920	0.0759
SEP 20,88	SEP 19,88	D 0.82		0.17	0.160		0.175		0.125	0.500	0.1072
SEP 23,88	SEP 22,88	D 0.16	D	0.12	D 0.025	D	0.045		0.065	0.230	0.0537
SEP 28,88	SEP 27,88	1.32	D	0.35	0.225	D	0.140	D	0.100	1.060	0.1479
OCT 1,88	SEP 30,88	1.64		0.54	0.395		0.130	B	0.205	0.910	0.1148

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : LONGWOODS/DAILY/AEROCHEM

#02

PAGE : 7

REMOVAL DATE	EXPOSURE DATE	SAMPLING START/END HR. HR.	PRECIP START/END HR. HR.	SAMPLE TYPE 01-RAIN 02-SNOW 03-COMP/04-OTHER	GAUGE DEPTH(MM)	GAUGE TYPE 01-STD. 02-NIPHER	SAMPLE NUMBER	PROJECT CODE 02-APIOS 03-SPECIAL	SUBPROJECT CODE 01-MOE 03-AES	SAMPLER EFFICI- ENCY (%)	COMMENTS FIELD OFFICE
OCT 2,88	OCT 1,88	800 800	2300 800	1	9.0	1	64870	2	1	99	B C
OCT 3,88	OCT 2,88	800 800	****	1	3.6	1	64871	2	1	96	HM
OCT 5,88	OCT 4,88	800 800	500 730	1	1.0	1	64872	2	1	49	
OCT 6,88	OCT 5,88	800 800	1500 1700	1	2.0	1	64873	2	1	89	C
OCT 9,88	OCT 8,88	800 800	1600 ****	1	1.6	1	64874	2	1	78	B
OCT 11,88	OCT 10,88	800 800	1600 1800	1	17.4	1	64875	2	1	97	NJHM
OCT 12,88	OCT 11,88	800 800	2400 800	2	****	1	64876	2	1	****	JHM
OCT 13,88	OCT 12,88	800 800	800 1400	2	5.2	1	64877	2	1	210	NJ
OCT 16,88	OCT 15,88	800 800	1830 1900	1	4.8	1	64878	2	1	105	J
OCT 17,88	OCT 16,88	800 800	1900 2100	1	1.6	1	64879	2	1	105	J
OCT 18,88	OCT 17,88	800 800	2000 2400	1	23.6	1	64880	2	1	97	N
OCT 22,88	OCT 21,88	800 800	1200 1600	1	11.0	1	64881	2	1	101	
OCT 24,88	OCT 23,88	800 800	1900 2100	1	5.2	1	64882	2	1	90	J
OCT 25,88	OCT 24,88	800 800	1500 1800	1	4.2	1	64883	2	1	110	B J
OCT 26,88	OCT 25,88	800 800	1200 1400	1	1.2	1	64884	2	1	61	
OCT 28,88	OCT 27,88	800 800	200 500	1	3.0	1	64885	2	1	52	J
NOV 1,88	OCT 31,88	800 930	200 500	1	1.4	1	64886	2	1	85	
NOV 4,88	NOV 3,88	800 800	2000 730	1	5.0	1	64887	2	1	****	FIE
NOV 5,88	NOV 4,88	800 900	600 900	1	7.8	1	64888	2	1	101	
NOV 6,88	NOV 5,88	900 800	900 1600	1	12.8	1	64889	2	1	90	C HCM
NOV 9,88	NOV 7,88	800 1400	600 1600	1	10.0	1	64890	2	1	120	Q Z
NOV 10,88	NOV 9,88	1400 900	1900 500	1	10.0	1	64891	2	1	99	X
NOV 11,88	NOV 10,88	900 800	1000 1200	1	2.4	1	64892	2	1	79	X
NOV 13,88	NOV 12,88	800 930	2200 900	1	27.2	1	64893	2	1	102	BC N
NOV 17,88	NOV 16,88	800 800	900 1000	1	3.2	1	64894	2	1	88	C X
NOV 20,88	NOV 19,88	800 800	300 900	1	6.6	1	64895	2	1	97	
NOV 21,88	NOV 20,88	800 800	1200 1600	3	17.6	1	64896	2	1	96	N
NOV 22,88	NOV 21,88	800 800	800 1000	3	3.8	1	64897	2	1	****	EG
NOV 29,88	NOV 28,88	800 800	1800 2300	3	0.3	2	64898	2	1	****	E N
DEC 1,88	NOV 30,88	800 800	2300 800	2	4.4	2	64900	2	1	39	NH
DEC 2,88	DEC 1,88	800 800	900 1400	2	1.4	2	64899	2	1	326	N
DEC 11,88	DEC 10,88	800 800	2000 700	2	2.0	2	64901	2	1	63	
DEC 13,88	DEC 12,88	800 800	2400 800	2	1.8	2	64902	2	1	65	
DEC 14,88	DEC 13,88	800 800	600 800	2	0.8	2	64903	2	1	40	
DEC 18,88	DEC 17,88	800 800	1900 2100	2	0.3	2	64904	2	1	77	
DEC 19,88	DEC 18,88	800 800	1900 2200	2	2.8	2	64905	2	1	78	J
DEC 21,88	DEC 20,88	800 800	1400 1900	1	1.0	2	64906	2	1	160	CD NJ
DEC 23,88	DEC 22,88	800 800	2000 400	3	12.6	2	64907	2	1	105	J
DEC 25,88	DEC 24,88	800 900	1200 1800	3	6.0	2	64908	2	1	105	J
DEC 27,88	DEC 26,88	800 1100	100 1100	1	11.8	2	64909	2	1	96	M

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : LONGWOODS/DAILY/AEROCHEM

#02

PAGE : 8

REMOVAL DATE	EXPOSURE DATE	VOLUME ML	CONDUCT. UMHO/CM	PH FIELD	PH LAB	TOTAL H+ TO PH8.3 MG/L	TOTAL H+ GRAN MG/L	SULPHATE MG/L	NITRATE AS N MG/L	
OCT 2,88	OCT 1,88	575.0	20.0		4.14	4.29	*****	0.0731	2.85	0.59
OCT 3,88	OCT 2,88	223.0	8.5	D	4.55	4.76	*****	0.0398	1.65	<M 0.01
OCT 5,88	OCT 4,88	32.0	13.5	*****		4.99	*****	0.0368	2.05	0.90
OCT 6,88	OCT 5,88	115.0	10.5		4.49	4.53	*****	0.0526	1.75	0.17
OCT 9,88	OCT 8,88	81.0	51.0	*****		7.38	*****	0.0237	6.35	UG 4.49
OCT 11,88	OCT 10,88	1085.0	8.5	UG	5.45	7.32	*****	0.0240	2.30	0.38
OCT 12,88	OCT 11,88	2761.0	1.5	LG	4.80	6.61	*****	0.0191	<T 0.20	<T 0.02
OCT 13,88	OCT 12,88	702.0	2.5	LG	4.81	5.54	*****	0.0209	LG 0.25	<T 0.03
OCT 16,88	OCT 15,88	324.0	42.5		3.82	4.21	*****	0.0969	5.20	0.81
OCT 17,88	OCT 16,88	108.0	23.5		4.31	4.95	*****	0.0381	4.50	0.67
OCT 18,88	OCT 17,88	1479.0	19.0		4.11	4.43	*****	0.0663	1.85	0.27
OCT 22,88	OCT 21,88	717.0	50.0		3.82	4.00	*****	0.1270	2.85	1.12
OCT 24,88	OCT 23,88	301.0	31.0		3.68	4.22	*****	0.0854	2.50	0.51
OCT 25,88	OCT 24,88	297.0	19.0		3.94	4.49	*****	0.0570	2.35	0.46
OCT 26,88	OCT 25,88	47.0	42.5	*****		4.12	*****	0.1050	5.95	0.55
OCT 28,88	OCT 27,88	101.0	71.0		3.35	3.77	*****	0.2020	5.20	1.60
NOV 1,88	OCT 31,88	77.0	39.0	*****		4.32	*****	0.0767	4.70	1.72
NOV 4,88	NOV 3,88	*****	*****	*****		*****	*****	*****	*****	*****
NOV 5,88	NOV 4,88	507.0	25.0		4.12	4.32	*****	0.0782	2.40	0.45
NOV 6,88	NOV 5,88	744.0	9.0		4.54	4.54	*****	0.0530	1.10	0.17
NOV 9,88	NOV 7,88	773.0	23.0	*****		4.35	*****	0.0851	2.10	0.45
NOV 10,88	NOV 9,88	636.0	*****	*****		*****	*****	*****	*****	*****
NOV 11,88	NOV 10,88	122.0	*****	*****		*****	*****	*****	*****	*****
NOV 13,88	NOV 12,88	1781.0	*****	4.19		*****	*****	*****	*****	*****
NOV 17,88	NOV 16,88	181.0	*****	*****		*****	*****	*****	*****	*****
NOV 20,88	NOV 19,88	411.0	*****	4.15		*****	*****	*****	*****	*****
NOV 21,88	NOV 20,88	1094.0	*****	4.36		*****	*****	*****	*****	*****
NOV 22,88	NOV 21,88	*****	*****	*****		*****	*****	*****	*****	*****
NOV 29,88	NOV 28,88	*****	*****	*****		*****	*****	*****	*****	*****
DEC 1,88	NOV 30,88	112.0	!IR *****	B 5.25		5.51	*****	0.0199	1.30	0.19
DEC 2,88	DEC 1,88	293.0	23.0		4.49	D 4.66	*****	0.0457	3.00	0.95
DEC 11,88	DEC 10,88	82.0	21.0	*****		UG 7.42	*****	0.0109	!IR *****	0.30
DEC 13,88	DEC 12,88	76.0	19.0	*****		4.56	*****	0.0474	LG 0.50	1.14
DEC 14,88	DEC 13,88	21.0	!IS *****	*****		4.65	*****	0.0442	0.70	0.59
DEC 18,88	DEC 17,88	15.0	!IS *****	*****		UG 7.51	*****	0.0111	0.55	0.27
DEC 19,88	DEC 18,88	141.0	!IS *****	4.34		5.34	*****	0.0241	1.05	0.70
DEC 21,88	DEC 20,88	103.0	35.5		5.10	6.28	*****	0.0209	7.75	1.09
DEC 23,88	DEC 22,88	853.0	29.0	LG	3.25	4.20	*****	0.0919	!CR *****	!CR *****
DEC 25,88	DEC 24,88	404.0	12.0		3.63	4.66	*****	0.0408	!CR *****	!CR *****
DEC 27,88	DEC 26,88	733.0	35.0	*****		4.04	*****	0.1180	3.55	0.16

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : LONGWOODS/DAILY/AEROCHEM #02										PAGE : 9	
REMOVAL DATE	EXPOSURE DATE	CALCIUM MG/L	CHLORIDE MG/L	MAGNESIM MG/L	POTASSIM MG/L	SODIUM MG/L	AMMONIUM AS N MG/L	FREE H+ LAB MG/L			
OCT 2,88	OCT 1,88	0.14	0.13	0.030	0.030	0.055	0.660	0.0513			
OCT 3,88	OCT 2,88	D 0.16	<W 0.01	D 0.035	0.040	0.030	0.190	0.0174			
OCT 5,88	OCT 4,88	!IS *****	0.28	!IS *****	!IS *****	!IS *****	0.670	0.0102			
OCT 6,88	OCT 5,88	0.10	0.40	<T 0.025	0.170	B 0.235	0.230	0.0295			
OCT 9,88	OCT 8,88	UG 5.12	0.82	UG 0.965	UG 0.430	0.095	UG 2.520	UG 0.0000			
OCT 11,88	OCT 10,88	0.50	0.09	0.095	0.055	<T 0.025	0.740	UG 0.0000			
OCT 12,88	OCT 11,88	<T 0.04	0.06	<T 0.010	0.045	0.035	LG 0.080	0.0002			
OCT 13,88	OCT 12,88	<T 0.02	0.09	<T 0.010	<T 0.010	0.030	LG 0.060	0.0029			
OCT 16,88	OCT 15,88	0.78	0.32	0.100	0.130	UG 0.215	0.760	0.0617			
OCT 17,88	OCT 16,88	1.22	0.27	0.235	B 0.475	0.080	0.610	0.0112			
OCT 18,88	OCT 17,88	<T 0.08	0.10	<T 0.010	0.030	0.035	0.196	0.0372			
OCT 22,88	OCT 21,88	0.12	D 0.28	<T 0.020	0.040	<T 0.025	0.436	0.1000			
OCT 24,88	OCT 23,88	<T 0.08	0.08	<T 0.015	0.030	<T 0.015	0.286	0.0603			
OCT 25,88	OCT 24,88	0.34	D 0.33	0.105	D 0.160	D 0.095	0.456	0.0324			
OCT 26,88	OCT 25,88	0.52	0.83	0.100	0.080	0.100	1.200	0.0759			
OCT 28,88	OCT 27,88	0.70	0.35	0.090	0.070	0.060	0.620	0.1698			
NOV 1,88	OCT 31,88	2.14	0.22	0.350	0.125	D 0.100	0.706	0.0479			
NOV 4,88	NOV 3,88	*****	*****	*****	*****	*****	*****	*****			
NOV 5,88	NOV 4,88	0.20	0.35	0.035	0.045	0.175	0.200	0.0479			
NOV 6,88	NOV 5,88	<T 0.08	0.13	<T 0.020	D 0.060	0.055	0.146	0.0288			
NOV 9,88	NOV 7,88	0.18	0.12	<T 0.025	<T 0.020	<T 0.015	0.226	0.0447			
NOV 10,88	NOV 9,88	*****	*****	*****	*****	*****	*****	*****			
NOV 11,88	NOV 10,88	*****	*****	*****	*****	*****	*****	*****			
NOV 13,88	NOV 12,88	*****	*****	*****	*****	*****	*****	*****			
NOV 17,88	NOV 16,88	*****	*****	*****	*****	*****	*****	*****			
NOV 20,88	NOV 19,88	*****	*****	*****	*****	*****	*****	*****			
NOV 21,88	NOV 20,88	*****	*****	*****	*****	*****	*****	*****			
NOV 22,88	NOV 21,88	*****	*****	*****	*****	*****	*****	*****			
NOV 29,88	NOV 28,88	*****	*****	*****	*****	*****	*****	*****			
DEC 1,88	NOV 30,88	0.24	<W 0.01	0.040	0.025	0.050	0.400	0.0031			
DEC 2,88	DEC 1,88	0.64	0.35	0.115	0.055	0.045	1.010	D 0.0219			
DEC 11,88	DEC 10,88	2.94	<W 0.01	0.545	0.040	0.085	0.220	UG 0.0000			
DEC 13,88	DEC 12,88	0.96	0.12	0.150	0.085	0.140	LG 0.046	0.0275			
DEC 14,88	DEC 13,88	!IS *****	0.40	!IS *****	!IS *****	!IS *****	0.200	0.0224			
DEC 18,88	DEC 17,88	!IS *****	0.30	!IS *****	!IS *****	!IS *****	0.116	UG 0.0000			
DEC 19,88	DEC 18,88	0.96	0.40	0.140	D 0.035	0.145	0.176	0.0046			
DEC 21,88	DEC 20,88	2.40	1.33	0.465	0.235	UG 0.790	1.290	0.0005			
DEC 23,88	DEC 22,88	0.14	!CR *****	0.030	0.030	0.050	0.256	0.0631			
DEC 25,88	DEC 24,88	0.34	!CR *****	0.030	0.035	0.025	0.090	0.0219			
DEC 27,88	DEC 26,88	0.16	0.30	0.030	<T 0.020	0.135	0.140	0.0912			

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : LONGWOODS/DAILY/AEROCHEM

#02

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REMOVAL DATE	EXPOSURE DATE	SAMPLING START/END HR. HR.	PRECIP START/END HR. HR.	SAMPLE TYPE 01-RAIN 02-SNOW 03-COMP/04-OTHER	GAUGE DEPTH(MM)	GAUGE TYPE 01-STD. 02-NIPHER	SAMPLE NUMBER	PROJECT CODE 02-APIOS 03-SPECIAL	SUBPROJECT CODE 01-MOE 03-AES	SAMPLER EFFICI- ENCY (%)	COMMENTS FIELD OFFICE
DEC 28,88	DEC 27,88	1100 1000	600 800	1	9.8	2	64910	2	1	101	

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : LONGWOODS/DAILY/AEROCHEM		#02	PAGE : 11						
REMOVAL DATE	EXPOSURE DATE	VOLUME ML	CONDUCT. UMHO/CM	PH FIELD	PH LAB	TOTAL H+ TO PH8.3 MG/L	TOTAL H+ GRAN MG/L	SULPHATE MG/L	NITRATE AS N MG/L
DEC 28,88	DEC 27,88	640.0	24.0	*****	4.26	*****	0.0753	1.80	0.37

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : LONGWOODS/DAILY/AEROCHEM

#02

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REMOVAL DATE	EXPOSURE DATE	CALCIUM MG/L	CHLORIDE MG/L	MAGNESIM MG/L	POTASSIM MG/L	SODIUM MG/L	AMMONIUM AS N MG/L	FREE H+ LAB MG/L
DEC 28,88	DEC 27,88	<T 0.08	0.18	<T 0.020	0.025	0.050	0.180	0.0550

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : MELBOURNE/DAILY/AEROCHEM

#01

PAGE : 1

REMOVAL DATE	EXPOSURE DATE	SAMPLING START/END HR. HR.	PRECIP START/END HR. HR.	SAMPLE TYPE 01-RAIN 02-SNOW 03-COMP/04-OTHER	GAUGE DEPTH(MM)	GAUGE TYPE 01-STD. 02-NIPHER	SAMPLE NUMBER	PROJECT CODE 02-APIOS 03-SPECIAL	SUBPROJECT CODE 01-MOE 03-AES	SAMPLER EFFICI- ENCY (%)	COMMENTS FIELD OFFICE	
JAN 4,88	JAN 3,88	800 800	****	****	3	0.2	2	61510	2	1	****	E N
JAN 14,88	JAN 13,88	800 800	1900	2400	2	0.8	2	61511	2	1	38	NH
JAN 17,88	JAN 16,88	800 800	****	****	1	2.6	2	61513	2	1	100	
JAN 18,88	JAN 17,88	800 800	1500	2400	1	8.8	2	61512	2	1	104	
JAN 19,88	JAN 18,88	800 800	****	****	1	0.2	2	61514	2	1	140	N
JAN 20,88	JAN 19,88	800 800	2200	100	1	2.0	2	61515	2	1	77	
JAN 22,88	JAN 21,88	800 800	900	1100	2	0.8	2	61516	2	1	****	E N
JAN 24,88	JAN 23,88	800 1200	1600	2300	3	2.0	2	61517	2	1	84	
JAN 26,88	JAN 25,88	800 800	500	900	2	2.6	2	61518	2	1	15	N
FEB 1,88	JAN 31,88	800 800	1300	2100	1	5.8	2	61519	2	1	103	
FEB 2,88	FEB 1,88	800 800	****	****	3	7.6	2	61520	2	1	63	
FEB 4,88	FEB 3,88	800 800	****	****	2	8.0	2	61521	2	1	69	
FEB 5,88	FEB 4,88	800 800	****	****	2	0.8	2	61522	2	1	33	N
FEB 9,88	FEB 8,88	800 800	****	****	2	1.6	2	61523	2	1	59	
FEB 12,88	FEB 11,88	800 800	****	****	2	11.2	2	61524	2	1	33	N
FEB 15,88	FEB 14,88	800 800	****	****	1	1.2	2	61525	2	1	127	N
FEB 17,88	FEB 16,88	800 800	2400	600	2	0.6	2	61526	2	1	62	
FEB 20,88	FEB 19,88	800 800	1100	1900	3	10.2	2	61527	2	1	100	
FEB 21,88	FEB 20,88	800 800	1500	1800	2	0.8	2	61528	2	1	68	
FEB 27,88	FEB 26,88	800 800	****	****	2	0.1	2	61529	2	1	****	E N
FEB 29,88	FEB 28,88	800 800	****	****	2	0.2	2	61530	2	1	****	E N
MAR 1,88	FEB 29,88	800 800	****	****	2	1.0	2	61531	2	1	76	H
MAR 9,88	MAR 8,88	800 800	****	****	1	0.2	2	61532	2	1	499	N
MAR 13,88	MAR 12,88	800 800	****	****	1	7.8	2	61533	2	1	80	
MAR 14,88	MAR 13,88	800 800	****	****	2	0.6	2	61534	2	1	20	XN
MAR 18,88	MAR 17,88	800 800	****	****	3	1.2	2	61535	2	1	46	N
MAR 19,88	MAR 18,88	800 800	****	****	2	0.2	2	61536	2	1	132	N
MAR 20,88	MAR 19,88	800 800	****	****	2	1.6	2	61537	2	1	38	N
MAR 23,88	MAR 22,88	800 800	****	****	1	1.6	2	61541	2	1	121	C N
MAR 26,88	MAR 25,88	800 800	815	1500	1	16.0	2	61542	2	1	102	H
MAR 28,88	MAR 27,88	800 800	****	****	1	1.3	2	61543	2	1	153	C NJHM
MAR 29,88	MAR 28,88	800 800	****	****	1	0.2	2	61544	2	1	257	N
MAR 30,88	MAR 29,88	800 800	1700	1900	1	0.6	1	61545	2	1	72	
APR 2,88	APR 1,88	800 800	****	****	1	1.6	1	61546	2	1	78	
APR 3,88	APR 2,88	800 1000	700	1000	1	3.2	1	61547	2	1	90	
APR 4,88	APR 3,88	1000 800	****	****	1	5.2	1	61548	2	1	88	
APR 7,88	APR 6,88	800 800	****	****	1	9.4	1	61549	2	1	91	
APR 15,88	APR 14,88	800 800	****	****	1	4.0	1	61550	2	1	154	NJ
APR 18,88	APR 17,88	800 800	****	****	3	11.4	1	61551	2	1	54	J
APR 19,88	APR 18,88	800 800	****	****	1	1.0	1	61552	2	1	23	N

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : MELBOURNE/DAILY/AEROCHEM				#01	PAGE : 2				
REMOVAL DATE	EXPOSURE DATE	VOLUME ML	CONDUCT. UMHO/CM	PH FIELD	PH LAB	TOTAL H+ TO PH8.3 MG/L	TOTAL H+ GRAN MG/L	SULPHATE MG/L	NITRATE AS N MG/L
JAN 4,88	JAN 3,88	*****	*****	*****	*****	*****	*****	*****	*****
JAN 14,88	JAN 13,88	20.0	28.5	*****	5.57	*****	0.0300	4.85	1.03
JAN 17,88	JAN 16,88	168.0	23.0	4.14	4.33	*****	0.0704	D 2.30	0.47
JAN 18,88	JAN 17,88	591.0	27.0	*****	4.18	*****	0.0873	2.10	0.44
JAN 19,88	JAN 18,88	18.0	!IS *****	*****	!IS *****	*****	!IS *****	!IS *****	!IS *****
JAN 20,88	JAN 19,88	99.0	46.0	3.73	D 3.97	*****	D 0.1440	3.75	1.21
JAN 22,88	JAN 21,88	*****	*****	*****	*****	*****	*****	*****	*****
JAN 24,88	JAN 23,88	108.0	44.5	3.73	4.03	*****	0.1350	3.50	1.36
JAN 26,88	JAN 25,88	26.0	19.5	*****	4.59	*****	0.0482	1.05	0.76
FEB 1,88	JAN 31,88	383.0	29.5	4.13	4.37	*****	0.0691	2.85	0.38
FEB 2,88	FEB 1,88	307.0	20.0	4.42	4.65	*****	0.0427	2.40	0.34
FEB 4,88	FEB 3,88	354.0	12.0	4.49	4.71	*****	0.0366	LG 0.45	0.29
FEB 5,88	FEB 4,88	17.0	13.0	*****	4.78	*****	0.0433	<W 0.05	0.68
FEB 9,88	FEB 8,88	61.0	40.5	*****	4.14	*****	0.1120	0.70	1.53
FEB 12,88	FEB 11,88	241.0	49.0	3.99	4.05	*****	0.1360	2.70	1.34
FEB 15,88	FEB 14,88	98.0	58.0	*****	4.05	*****	0.1390	5.80	1.21
FEB 17,88	FEB 16,88	24.0	D 17.0	*****	6.05	*****	0.0200	D 1.45	0.86
FEB 20,88	FEB 19,88	660.0	44.0	3.92	4.13	*****	0.1060	2.80	0.89
FEB 21,88	FEB 20,88	35.0	!IS *****	*****	4.25	*****	D 0.0850	!IS *****	!IS *****
FEB 27,88	FEB 26,88	*****	*****	*****	*****	*****	*****	*****	*****
FEB 29,88	FEB 28,88	*****	*****	*****	*****	*****	*****	*****	*****
MAR 1,88	FEB 29,88	49.0	29.0	*****	UG 6.92	*****	0.0173	3.60	1.41
MAR 9,88	MAR 8,88	64.0	59.0	*****	4.33	*****	0.0818	7.00	1.95
MAR 13,88	MAR 12,88	404.0	33.5	4.20	4.32	*****	0.0782	3.15	0.49
MAR 14,88	MAR 13,88	8.0	*****	*****	*****	*****	*****	*****	*****
MAR 18,88	MAR 17,88	36.0	49.5	*****	4.17	*****	0.0978	3.00	2.00
MAR 19,88	MAR 18,88	17.0	!IS *****	*****	4.58	*****	0.0551	!IS *****	!IS *****
MAR 20,88	MAR 19,88	40.0	D 18.5	*****	4.69	*****	0.0431	D 1.20	0.54
MAR 23,88	MAR 22,88	125.0	51.5	UG 6.73	UG 7.16	*****	0.0212	8.10	1.83
MAR 26,88	MAR 25,88	1054.0	D 25.5	4.33	4.42	*****	D 0.0632	D 2.90	0.44
MAR 28,88	MAR 27,88	128.0	23.5	UG 5.71	UG 7.72	*****	0.0178	4.40	0.73
MAR 29,88	MAR 28,88	33.0	!IS *****	*****	4.28	*****	0.0939	!IS *****	!IS *****
MAR 30,88	MAR 29,88	28.0	53.0	*****	4.25	*****	0.0958	UG 9.05	1.32
APR 2,88	APR 1,88	81.0	72.5	*****	3.87	*****	0.1730	6.25	1.51
APR 3,88	APR 2,88	186.0	46.5	D 3.89	D 4.10	*****	0.1090	5.15	0.79
APR 4,88	APR 3,88	295.0	17.5	4.19	4.55	*****	0.0475	1.55	0.26
APR 7,88	APR 6,88	554.0	70.5	3.68	3.89	*****	0.1740	6.35	1.39
APR 15,88	APR 14,88	397.0	52.0	UG 6.54	UG 7.30	*****	0.0145	7.10	2.16
APR 18,88	APR 17,88	398.0	40.0	UG 6.46	UG 7.56	*****	D 0.0172	6.30	1.11
APR 19,88	APR 18,88	15.0	21.0	*****	UG 7.19	*****	0.0175	1.95	0.62

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : MELBOURNE/DAILY/AEROCHEM

#01

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REMOVAL DATE	EXPOSURE DATE	CALCIUM MG/L	CHLORIDE MG/L	MAGNESIUM MG/L	POTASSIUM MG/L	SODIUM MG/L	AMMONIUM AS N MG/L	FREE H+ LAB MG/L
JAN 4,88	JAN 3,88	*****	*****	*****	*****	*****	*****	*****
JAN 14,88	JAN 13,88	1.80	0.74	0.325	0.160	0.360	0.750	0.0027
JAN 17,88	JAN 16,88	0.38	0.25	0.060	D 0.040	0.110	0.220	0.0468
JAN 18,88	JAN 17,88	0.14	0.17	<T 0.020	<T 0.020	0.050	D 0.110	0.0661
JAN 19,88	JAN 18,88	!IS *****	!IS *****	!IS *****	!IS *****	!IS *****	0.700	!IS *****
JAN 20,88	JAN 19,88	0.47	0.29	0.055	0.055	0.090	0.360	D 0.1072
JAN 22,88	JAN 21,88	*****	*****	*****	*****	*****	*****	*****
JAN 24,88	JAN 23,88	0.50	0.43	0.050	0.030	0.105	0.750	0.0933
JAN 26,88	JAN 25,88	!IS *****	0.39	!IS *****	!IS *****	!IS *****	0.440	0.0257
FEB 1,88	JAN 31,88	0.18	0.56	0.055	<T 0.020	0.320	0.380	0.0427
FEB 2,88	FEB 1,88	0.12	0.20	0.030	0.105	0.115	0.510	0.0224
FEB 4,88	FEB 3,88	<T 0.06	0.22	<T 0.020	<W 0.005	0.065	LG 0.040	0.0195
FEB 5,88	FEB 4,88	!IS *****	0.28	!IS *****	!IS *****	!IS *****	0.390	0.0166
FEB 9,88	FEB 8,88	0.42	0.71	0.060	0.120	0.260	0.150	0.0724
FEB 12,88	FEB 11,88	0.16	0.40	<T 0.025	<T 0.020	0.095	0.650	0.0891
FEB 15,88	FEB 14,88	0.94	0.96	0.100	0.190	0.545	0.630	0.0891
FEB 17,88	FEB 16,88	!IS *****	0.48	!IS *****	!IS *****	!IS *****	0.510	0.0009
FEB 20,88	FEB 19,88	0.18	0.24	0.030	0.040	0.055	0.420	0.0741
FEB 21,88	FEB 20,88	0.16	!IS *****	0.035	<T 0.015	0.075	0.800	0.0562
FEB 27,88	FEB 26,88	*****	*****	*****	*****	*****	*****	*****
FEB 29,88	FEB 28,88	*****	*****	*****	*****	*****	*****	*****
MAR 1,88	FEB 29,88	1.38	0.45	0.240	<T 0.020	0.165	1.380	UG 0.0001
MAR 9,88	MAR 8,88	2.04	0.66	0.255	0.155	0.410	1.620	0.0468
MAR 13,88	MAR 12,88	0.40	0.29	0.050	0.055	0.130	0.380	0.0479
MAR 14,88	MAR 13,88	*****	*****	*****	*****	*****	*****	*****
MAR 18,88	MAR 17,88	!IS *****	1.38	!IS *****	!IS *****	!IS *****	1.160	0.0676
MAR 19,88	MAR 18,88	0.14	!IS *****	0.030	0.120	0.110	0.800	0.0263
MAR 20,88	MAR 19,88	!IS *****	0.40	!IS *****	!IS *****	!IS *****	0.400	0.0204
MAR 23,88	MAR 22,88	2.64	0.99	0.470	0.250	0.665	UG 2.450	UG 0.0001
MAR 26,88	MAR 25,88	0.52	0.18	0.070	0.035	0.115	0.480	0.0380
MAR 28,88	MAR 27,88	0.96	0.25	0.200	0.325	0.140	1.200	UG 0.0000
MAR 29,88	MAR 28,88	1.58	!IS *****	0.175	D 0.240	D 0.530	1.630	0.0525
MAR 30,88	MAR 29,88	1.96	0.46	0.295	0.205	0.445	1.130	0.0562
APR 2,88	APR 1,88	0.72	0.41	0.110	0.095	0.125	0.610	0.1349
APR 3,88	APR 2,88	0.68	0.51	0.085	0.090	0.345	0.440	D 0.0794
APR 4,88	APR 3,88	0.16	0.07	0.025	<T 0.025	0.035	0.170	0.0282
APR 7,88	APR 6,88	1.06	0.29	0.115	0.100	0.160	0.870	0.1288
APR 15,88	APR 14,88	2.28	0.47	0.400	0.195	0.255	UG 3.250	UG 0.0001
APR 18,88	APR 17,88	1.86	0.22	0.405	0.095	0.130	UG 2.500	UG 0.0000
APR 19,88	APR 18,88	!IS *****	0.51	!IS *****	!IS *****	!IS *****	1.030	UG 0.0001

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : MELBOURNE/DAILY/AEROCHEM

#01

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REMOVAL DATE	EXPOSURE DATE	SAMPLING START/END HR. HR.	PRECIP START/END HR. HR.	SAMPLE TYPE 01-RAIN 02-SNOW 03-COMP/04-OTHER	GAUGE DEPTH(MM)	GAUGE TYPE 01-STD. 02-NIPHER	SAMPLE NUMBER	PROJECT CODE 02-APIOS 03-SPECIAL	SUBPROJECT CODE 01-MOE 03-AES	SAMPLER EFFICI- ENCY (%)	COMMENTS FIELD OFFICE	
APR 21,88	APR 20,88	800 800	****	****	1	4.2	1	61553	2	1	84	J
APR 24,88	APR 23,88	800 800	****	****	1	6.6	1	61554	2	1	89	J
APR 27,88	APR 26,88	800 800	****	****	1	2.0	1	61555	2	1	77	JH
APR 28,88	APR 27,88	800 800	****	****	1	2.0	1	61556	2	1	86	J
APR 29,88	APR 28,88	800 800	****	****	1	0.2	1	61557	2	1	****	E N
MAY 3,88	MAY 2,88	800 800	****	****	1	1.2	1	61558	2	1	65	
MAY 9,88	MAY 8,88	800 800	****	****	1	1.0	1	61559	2	1	93	
MAY 10,88	MAY 9,88	800 800	****	****	1	12.8	1	61560	2	1	50	J
MAY 16,88	MAY 15,88	800 800	****	****	1	27.3	1	61561	2	1	92	N
MAY 17,88	MAY 16,88	800 800	****	****	1	1.4	1	61564	2	1	60	
MAY 19,88	MAY 18,88	800 800	****	****	1	1.2	1	61565	2	1	106	HCM
MAY 20,88	MAY 19,88	800 800	****	****	1	2.4	1	61566	2	1	85	
MAY 21,88	MAY 20,88	800 800	****	****	1	4.2	1	61567	2	1	97	
MAY 22,88	MAY 21,88	800 800	****	****	1	1.0	1	61568	2	1	65	
MAY 24,88	MAY 23,88	800 800	****	****	1	0.1	1	61569	2	1	****	E N
MAY 27,88	MAY 26,88	800 800	****	****	1	2.0	1	61570	2	1	95	H
JUN 2,88	JUN 1,88	800 800	2000	****	1	9.6	1	61571	2	1	96	H
JUN 3,88	JUN 2,88	800 800	****	****	1	1.0	1	61572	2	1	40	N
JUN 9,88	JUN 8,88	800 800	1830	2030	1	2.4	1	61573	2	1	90	
JUN 23,88	JUN 22,88	800 800	2100	****	1	0.6	1	61575	2	1	93	
JUN 29,88	JUN 28,88	800 800	2000	****	1	1.0	1	61576	2	1	87	AC
JUL 10,88	JUL 9,88	800 800	****	****	1	17.0	1	61578	2	1	99	J
JUL 17,88	JUL 16,88	800 800	1800	2300	1	39.6	1	61582	2	1	70	
JUL 19,88	JUL 18,88	800 800	****	****	1	3.0	1	61585	2	1	92	C
JUL 21,88	JUL 20,88	800 800	****	****	1	0.2	*	64837	2	1	****	E N
JUL 23,88	JUL 22,88	800 1200	630	1100	1	4.4	1	64838	2	1	100	J
JUL 28,88	JUL 27,88	800 800	****	****	1	4.2	1	61587	2	1	85	JH
JUL 31,88	JUL 30,88	800 800	****	****	1	4.8	1	61588	2	1	90	
AUG 1,88	JUL 31,88	800 1200	****	****	1	3.4	1	61589	2	1	87	JH
AUG 6,88	AUG 5,88	800 800	****	****	1	14.6	1	61590	2	1	103	J
AUG 10,88	AUG 9,88	800 800	****	****	1	7.0	1	61593	2	1	U 59	G
AUG 12,88	AUG 11,88	800 800	****	****	1	7.0	1	61594	2	1	88	J
AUG 18,88	AUG 17,88	800 800	2000	2200	1	2.3	1	61595	2	1	78	
AUG 24,88	AUG 23,88	800 800	****	****	1	7.2	1	61596	2	1	99	J
AUG 25,88	AUG 24,88	800 800	****	****	1	2.2	1	61597	2	1	85	J
AUG 28,88	AUG 27,88	800 800	****	****	1	1.6	1	61598	2	1	82	
SEP 3,88	SEP 2,88	800 800	2200	****	1	1.6	1	61599	2	1	108	J
SEP 4,88	SEP 3,88	800 800	2300	530	1	18.6	1	61600	2	1	100	
SEP 6,88	SEP 5,88	800 800	1500	****	1	20.2	1	61603	2	1	107	
SEP 7,88	SEP 6,88	800 800	****	****	1	0.4	1	61605	2	1	****	E N

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REMOVAL DATE	EXPOSURE DATE	VOLUME ML	CONDUCT. UMHO/CM		PH FIELD	PH LAB	TOTAL H+ TO PH8.3 MG/L	TOTAL H+ GRAN MG/L	SULPHATE MG/L	NITRATE AS N MG/L	
APR 21,88	APR 20,88	228.0	58.0	UG	6.61	UG	7.62	*****	0.0121	7.50	1.24
APR 24,88	APR 23,88	379.0	54.5	LG	3.24		4.07	*****	0.1390	6.55	0.82
APR 27,88	APR 26,88	99.0	30.5	UG	5.96	UG	7.03	*****	0.0187	5.20	1.01
APR 28,88	APR 27,88	111.0	66.5	LG	3.36		4.13	*****	0.1310	7.55	1.99
APR 29,88	APR 28,88	*****	*****		*****		*****	*****	*****	*****	*****
MAY 3,88	MAY 2,88	50.0	39.0		*****		4.58	*****	0.0564	7.50	0.64
MAY 9,88	MAY 8,88	60.0	54.5		*****	UG	7.23	*****	0.0220	9.40	1.23
MAY 10,88	MAY 9,88	416.0	15.5		4.43		4.95	*****	0.0352	3.00	0.46
MAY 16,88	MAY 15,88	1617.0	D 52.0		3.84		4.20	*****	D 0.1060	6.60	1.19
MAY 17,88	MAY 16,88	54.0	33.0		*****	UG	7.43	*****	0.0171	3.35	1.01
MAY 19,88	MAY 18,88	82.0	16.0		*****	UG	7.53	*****	0.0127	2.00	0.48
MAY 20,88	MAY 19,88	131.0	8.0		*****		5.00	*****	0.0293	1.35	0.27
MAY 21,88	MAY 20,88	263.0	86.5		*****		3.81	*****	0.1970	6.75	1.69
MAY 22,88	MAY 21,88	42.0	> 100.0		*****		3.89	*****	0.1820	11.70	UG 2.82
MAY 24,88	MAY 23,88	*****	*****		*****		*****	*****	*****	*****	*****
MAY 27,88	MAY 26,88	122.0	30.0		*****	UG	7.01	*****	0.0165	4.75	1.28
JUN 2,88	JUN 1,88	592.0	17.5		*****		4.77	*****	0.0413	3.05	0.39
JUN 3,88	JUN 2,88	26.0	37.5		*****	UG	7.71	*****	0.0106	2.15	1.22
JUN 9,88	JUN 8,88	139.0	16.0		*****	UG	7.36	*****	0.0156	2.45	0.22
JUN 23,88	JUN 22,88	36.0	84.0		*****	UG	7.52	*****	0.0195	10.10	UG 2.71
JUN 29,88	JUN 28,88	56.0	45.0		*****	UG	7.58	*****	0.0163	4.15	0.65
JUL 10,88	JUL 9,88	1084.0	83.5	LG	3.11		3.75	*****	0.2050	8.55	0.91
JUL 17,88	JUL 16,88	1800.0	24.5		4.03		4.41	*****	0.0572	2.55	0.36
JUL 19,88	JUL 18,88	178.0	> 100.0		3.38		3.54	*****	0.2930	UG 17.30	1.40
JUL 21,88	JUL 20,88	*****	*****		*****		*****	*****	*****	*****	*****
JUL 23,88	JUL 22,88	283.0	40.0		3.55		4.07	*****	0.1000	2.80	0.82
JUL 28,88	JUL 27,88	230.0	21.0		4.80		5.34	*****	0.0280	3.95	0.89
JUL 31,88	JUL 30,88	279.0	33.0		3.90		4.16	*****	0.0890	4.45	0.56
AUG 1,88	JUL 31,88	191.0	27.0		4.33		5.21	*****	0.0302	4.40	0.96
AUG 6,88	AUG 5,88	972.0	49.0	D	3.38		3.99	*****	0.1370	5.05	0.50
AUG 10,88	AUG 9,88	268.0	> 100.0		3.32	D	3.63	*****	D 0.2660	11.50	1.27
AUG 12,88	AUG 11,88	397.0	60.0		3.63		4.00	*****	0.1360	6.20	1.35
AUG 18,88	AUG 17,88	115.0	22.0	UG	4.98		5.45	*****	0.0290	3.55	0.78
AUG 24,88	AUG 23,88	458.0	48.0		3.52		3.92	*****	0.1350	5.05	0.66
AUG 25,88	AUG 24,88	120.0	15.5		4.00		4.55	*****	0.0518	2.10	0.28
AUG 28,88	AUG 27,88	85.0	77.0		*****		3.80	*****	0.1960	9.00	1.64
SEP 3,88	SEP 2,88	111.0	86.0		3.98		3.79	*****	0.2160	10.45	1.39
SEP 4,88	SEP 3,88	1199.0	32.0		3.97		4.15	*****	0.1000	2.90	0.31
SEP 6,88	SEP 5,88	1388.0	21.5		4.14		4.30	*****	0.0722	2.60	0.23
SEP 7,88	SEP 6,88	*****	*****		*****		*****	*****	*****	*****	*****

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REMOVAL DATE		EXPOSURE DATE		CALCIUM	CHLORIDE	MAGNESIUM	POTASSIUM	SODIUM	AMMONIUM	FREE H+
				MG/L	MG/L	MG/L	MG/L	MG/L	AS N MG/L	LAB MG/L
APR 21,88	APR 20,88	UG	4.36	0.53	UG	0.930	0.200	0.190	2.020	UG 0.0000
APR 24,88	APR 23,88		1.02	0.24		0.140	0.110	0.095	0.740	0.0851
APR 27,88	APR 26,88		0.84	0.14		0.165	0.060	0.110	> 2.000	UG 0.0001
APR 28,88	APR 27,88		1.80	0.48		0.275	0.155	0.090	1.640	0.074
APR 29,88	APR 28,88		*****	*****		*****	*****	*****	*****	*****
MAY 3,88	MAY 2,88		0.36	0.34		0.065	0.040	0.150	1.925	0.0263
MAY 9,88	MAY 8,88		2.36	UG 1.50		0.475	UG 0.885	UG 0.875	2.375	UG 0.0001
MAY 10,88	MAY 9,88		0.44	0.15		0.075	0.085	0.060	0.725	0.0112
MAY 16,88	MAY 15,88		1.22	D 0.27		0.135	0.070	0.075	1.100	0.0631
MAY 17,88	MAY 16,88		2.28	0.30		0.450	0.235	UG 0.210	1.275	UG 0.0000
MAY 19,88	MAY 18,88		1.26	0.19		0.175	D 0.120	D 0.115	0.270	UG 0.0000
MAY 20,88	MAY 19,88		0.24	0.14		0.030	0.065	0.085	0.306	0.0100
MAY 21,88	MAY 20,88		0.46	0.26		0.070	0.045	0.035	0.852	0.1549
MAY 22,88	MAY 21,88	!IS	*****	0.56	!IS	*****	!IS	*****	!IS	*****
MAY 24,88	MAY 23,88		*****	*****		*****	*****	*****	*****	*****
MAY 27,88	MAY 26,88		1.20	0.30		0.280	0.115	0.110	1.810	UG 0.0001
JUN 2,88	JUN 1,88		0.52	0.18		0.110	0.145	0.100	0.604	0.0170
JUN 3,88	JUN 2,88	!IS	*****	0.59	!IS	*****	!IS	*****	!IS	*****
JUN 9,88	JUN 8,88		0.80	0.15		0.210	0.700	0.060	D 0.526	UG 0.0000
JUN 23,88	JUN 22,88	!IS	*****	0.69	!IS	*****	!IS	*****	!IS	*****
JUN 29,88	JUN 28,88	!IS	*****	0.37	!IS	*****	!IS	*****	!IS	*****
JUL 10,88	JUL 9,88		0.48	0.29		0.090	0.180	0.075	0.520	0.1778
JUL 17,88	JUL 16,88		0.26	0.13		0.065	0.025	0.075	0.334	0.0389
JUL 19,88	JUL 18,88		0.52	0.26		0.095	0.065	0.045	1.710	0.2884
JUL 21,88	JUL 20,88		*****	*****		*****	*****	*****	*****	*****
JUL 23,88	JUL 22,88		0.24	0.15		0.040	<T 0.020	<T 0.010	0.218	0.0851
JUL 28,88	JUL 27,88		1.44	0.20		0.255	0.070	0.045	0.592	0.0046
JUL 31,88	JUL 30,88		0.44	0.14		0.085	0.055	0.040	0.560	0.0692
AUG 1,88	JUL 31,88		1.24	0.20	D	0.195	0.070	0.060	1.000	0.0062
AUG 6,88	AUG 5,88		0.18	0.08		0.035	<T 0.015	<T 0.015	0.406	0.1023
AUG 10,88	AUG 9,88		0.52	0.34		0.140	0.055	0.050	0.906	D 0.2344
AUG 12,88	AUG 11,88		0.98	0.26		0.180	0.050	0.050	0.906	0.1000
AUG 18,88	AUG 17,88		0.90	0.25		0.150	0.135	0.155	0.956	0.0035
AUG 24,88	AUG 23,88		0.20	0.14		0.045	<T 0.020	<T 0.010	0.296	0.1202
AUG 25,88	AUG 24,88		0.18	0.08		0.045	0.080	0.055	0.296	0.0282
AUG 28,88	AUG 27,88		1.12	0.41		0.165	0.260	0.040	1.450	0.1585
SEP 3,88	SEP 2,88	D	1.14	0.36	D	0.190	D 0.095	0.045	0.926	0.1622
SEP 4,88	SEP 3,88	<T	0.02	<W 0.01	<W	0.005	<T 0.015	<T 0.010	0.360	0.0708
SEP 6,88	SEP 5,88	<W	0.02	0.04	<T	0.005	<T 0.015	<T 0.005	0.376	0.0501
SEP 7,88	SEP 6,88		*****	*****		*****	*****	*****	*****	*****

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : MELBOURNE/DAILY/AEROCHEM

#01

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REMOVAL DATE	EXPOSURE DATE	SAMPLING START/END HR. HR.	PRECIP START/END HR. HR.	SAMPLE TYPE 01-RAIN 02-SNOW 03-COMP/04-OTHER	GAUGE DEPTH(MM)	GAUGE TYPE 01-STD. 02-NIPHER	SAMPLE NUMBER	PROJECT CODE 02-APIOS 03-SPECIAL	SUBPROJECT CODE 01-MOE 03-AES	SAMPLER EFFICI- ENCY (%)	COMMENTS FIELD OFFICE
SEP 13,88	SEP 12,88	800 800	1400 1500	1	3.0	1	61606	2	1	110	J
SEP 17,88	SEP 16,88	800 800	2200 2300	1	2.4	1	61607	2	1	85	
SEP 19,88	SEP 18,88	800 800	****	1	1.0	1	61608	2	1	74	
SEP 20,88	SEP 19,88	800 800	2200 2400	1	1.2	1	61609	2	1	102	
SEP 25,88	SEP 22,88	800 800	2100 2300	1	27.0	1	61610	2	1	107	NJY3
SEP 28,88	SEP 27,88	800 800	****	1	0.3	1	61611	2	1	****	E N
OCT 2,88	OCT 1,88	800 1000	1900 2300	1	9.2	1	61612	2	1	101	C
OCT 3,88	OCT 2,88	1000 800	****	1	4.2	1	61613	2	1	87	CM
OCT 6,88	OCT 5,88	800 800	800 1200	1	8.2	1	61614	2	1	97	HM
OCT 10,88	OCT 9,88	800 1000	****	1	1.8	1	61615	2	1	72	H
OCT 11,88	OCT 10,88	1000 800	****	1	11.2	1	61616	2	1	96	JHCM
OCT 12,88	OCT 11,88	800 800	2300 800	3	6.4	1	61617	2	1	87	JHM
OCT 13,88	OCT 12,88	800 800	800 1200	3	12.2	1	61618	2	1	107	C
OCT 16,88	OCT 15,88	800 800	1900 1930	1	2.2	1	61619	2	1	78	
OCT 17,88	OCT 16,88	800 800	200 ****	1	2.0	1	61620	2	1	76	
OCT 18,88	OCT 17,88	800 800	2000 100	1	40.2	1	61621	2	1	48	NHM
OCT 20,88	OCT 19,88	800 800	****	3	2.0	1	61624	2	1	88	JH
OCT 22,88	OCT 21,88	800 800	1200 1600	1	11.4	1	61625	2	1	98	J
OCT 24,88	OCT 23,88	800 800	1900 2100	1	5.6	1	61626	2	1	90	JHM
OCT 25,88	OCT 24,88	800 800	1500 1800	1	4.0	1	61627	2	1	79	J
OCT 26,88	OCT 25,88	800 800	****	1	1.0	1	61628	2	1	40	HCM
OCT 28,88	OCT 27,88	800 800	130 430	1	1.6	1	61629	2	1	76	
NOV 1,88	OCT 31,88	800 800	2300 200	1	0.8	1	61630	2	1	72	
NOV 2,88	NOV 1,88	800 800	****	1	1.4	1	61631	2	1	70	
NOV 4,88	NOV 3,88	800 800	2300 800	1	5.2	1	61632	2	1	94	
NOV 5,88	NOV 4,88	800 1900	500 830	1	17.8	1	61633	2	1	93	B NC
NOV 6,88	NOV 5,88	1900 1800	1900 1800	3	2.8	1	61636	2	1	106	HCM
NOV 7,88	NOV 6,88	1800 800	****	3	2.2	1	61637	2	1	74	C
NOV 8,88	NOV 7,88	800 800	700 1630	1	4.2	1	61638	2	1	97	
NOV 9,88	NOV 8,88	800 800	****	1	0.8	1	61639	2	1	70	
NOV 10,88	NOV 9,88	800 800	2000 500	1	11.8	1	61640	2	1	89	
NOV 13,88	NOV 12,88	800 1600	2100 900	1	25.0	1	61641	2	1	94	N
NOV 17,88	NOV 16,88	800 800	900 1000	1	4.0	1	61642	2	1	87	C
NOV 20,88	NOV 19,88	800 1400	1900 1900	1	16.0	1	61643	2	1	96	N
NOV 21,88	NOV 20,88	1700 800	1200 1700	3	8.0	1	61646	2	1	89	
NOV 22,88	NOV 21,88	800 800	****	1	1.0	1	61647	2	1	20	
NOV 27,88	NOV 26,88	800 800	****	1	0.6	2	61648	2	1	239	N
DEC 1,88	NOV 30,88	800 800	****	2	2.4	2	61649	2	1	101	
DEC 2,88	DEC 1,88	800 800	****	2	0.2	2	61650	2	1	****	E N
DEC 9,88	DEC 8,88	800 800	****	2	0.2	2	61651	2	1	****	E N

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REMOVAL DATE	EXPOSURE DATE	VOLUME ML	CONDUCT. UMHO/CM	PH FIELD	PH LAB	TOTAL H+ TO PH8.3 MG/L	TOTAL H+ GRAN MG/L	SULPHATE MG/L	NITRATE AS N MG/L
SEP 13,88	SEP 12,88	213.0	37.0	3.72	4.13	*****	0.1170	4.80	0.43
SEP 17,88	SEP 16,88	132.0	> 100.0	3.35	3.56	*****	D 0.4180	13.70	1.27
SEP 19,88	SEP 18,88	48.0	D 61.0	*****	4.09	*****	0.1190	D 9.40	1.69
SEP 20,88	SEP 19,88	79.0	44.5	*****	4.07	*****	0.1320	5.95	0.55
SEP 25,88	SEP 22,88	1866.0	30.0	3.76	4.19	*****	0.0942	3.00	0.49
SEP 28,88	SEP 27,88	*****	*****	*****	*****	*****	*****	*****	*****
OCT 2,88	OCT 1,88	596.0	23.0	4.23	4.27	*****	0.0810	3.05	0.65
OCT 3,88	OCT 2,88	236.0	D 13.0	4.40	4.35	*****	0.0724	1.80	0.22
OCT 6,88	OCT 5,88	510.0	8.0	4.66	4.73	*****	0.0403	1.20	<W 0.01
OCT 10,88	OCT 9,88	84.0	38.0	*****	5.02	*****	0.0364	4.65	UG 3.13
OCT 11,88	OCT 10,88	692.0	9.0	UG 5.45	UG 7.10	*****	0.0224	2.60	0.43
OCT 12,88	OCT 11,88	358.0	LG 2.0	UG 5.44	UG 6.84	*****	0.0194	LG 0.40	<T 0.04
OCT 13,88	OCT 12,88	841.0	LG 2.5	4.96	5.43	*****	0.0223	LG 0.70	LG 0.08
OCT 16,88	OCT 15,88	111.0	50.0	3.91	4.12	*****	0.1200	7.05	1.21
OCT 17,88	OCT 16,88	98.0	24.0	*****	4.54	*****	0.0585	3.95	0.56
OCT 18,88	OCT 17,88	1244.0	15.5	4.21	4.46	*****	0.0560	1.60	<T 0.02
OCT 20,88	OCT 19,88	113.0	13.0	4.79	5.43	*****	0.0246	2.95	0.40
OCT 22,88	OCT 21,88	723.0	39.0	3.55	4.04	*****	0.1230	2.50	0.99
OCT 24,88	OCT 23,88	324.0	26.0	3.70	4.24	*****	0.0863	2.30	<T 0.04
OCT 25,88	OCT 24,88	203.0	17.0	4.01	4.53	*****	0.0550	1.95	0.49
OCT 26,88	OCT 25,88	26.0	19.5	*****	4.46	*****	0.0569	3.30	0.30
OCT 28,88	OCT 27,88	78.0	60.0	*****	3.85	*****	0.1750	5.05	1.65
NOV 1,88	OCT 31,88	37.0	43.0	*****	4.02	*****	0.1220	3.85	1.34
NOV 2,88	NOV 1,88	63.0	44.5	*****	4.37	*****	0.0818	6.35	2.07
NOV 4,88	NOV 3,88	316.0	64.5	3.78	D 3.84	*****	0.1990	5.20	1.58
NOV 5,88	NOV 4,88	1066.0	16.5	4.33	4.29	*****	0.0807	1.55	0.28
NOV 6,88	NOV 5,88	192.0	11.5	4.56	4.36	*****	0.0706	1.15	0.29
NOV 7,88	NOV 6,88	105.0	10.0	4.57	4.55	*****	D 0.0531	B 0.50	0.40
NOV 8,88	NOV 7,88	263.0	22.0	4.26	4.31	*****	0.0746	1.85	0.37
NOV 9,88	NOV 8,88	36.0	D 64.0	*****	!IS *****	*****	!IS *****	D 4.90	1.65
NOV 10,88	NOV 9,88	676.0	20.0	*****	D 4.29	*****	0.0702	2.05	0.29
NOV 13,88	NOV 12,88	1522.0	D 23.0	4.15	4.28	*****	0.0785	2.05	0.42
NOV 17,88	NOV 16,88	224.0	D 8.5	4.15	4.29	*****	0.0750	4.55	0.44
NOV 20,88	NOV 19,88	989.0	17.5	4.29	4.31	*****	0.0654	1.70	0.29
NOV 21,88	NOV 20,88	458.0	15.0	4.36	4.43	*****	0.0548	1.70	0.20
NOV 22,88	NOV 21,88	13.0	!IS *****	*****	4.90	*****	0.0288	!IS *****	!IS *****
NOV 27,88	NOV 26,88	92.0	!CR *****	*****	3.82	*****	D 0.1970	UG 9.10	0.18
DEC 1,88	NOV 30,88	156.0	!CR *****	4.56	4.66	*****	0.0492	2.65	0.96
DEC 2,88	DEC 1,88	*****	*****	*****	*****	*****	*****	*****	*****
DEC 9,88	DEC 8,88	*****	*****	*****	*****	*****	*****	*****	*****

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : MELBOURNE/DAILY/AEROCHEM		#01		PAGE : 9						
REMOVAL DATE	EXPOSURE DATE	CALCIUM MG/L	CHLORIDE MG/L	MAGNESIUM MG/L	POTASSIUM MG/L	SODIUM MG/L	AMMONIUM AS N MG/L	FREE H+ LAB MG/L		
SEP 13,88	SEP 12,88	0.48	B 1.16	0.085	0.040	0.080	0.370	0.0741		
SEP 17,88	SEP 16,88	0.76	0.35	0.115	0.100	D 0.120	0.920	0.2754		
SEP 19,88	SEP 18,88	D 1.90	D 0.55	D 0.395	0.160	D 0.130	1.690	0.0813		
SEP 20,88	SEP 19,88	0.48	B 1.04	0.100	0.095	0.110	0.466	0.0851		
SEP 25,88	SEP 22,88	0.18	0.11	0.030	<T 0.020	0.040	0.306	0.0646		
SEP 28,88	SEP 27,88	*****	*****	*****	*****	*****	*****	*****		
OCT 2,88	OCT 1,88	0.12	0.16	<T 0.010	0.035	D 0.090	0.770	0.0537		
OCT 3,88	OCT 2,88	<T 0.02	D 0.19	<W 0.005	0.035	0.050	0.320	0.0447		
OCT 6,88	OCT 5,88	<W 0.02	<W 0.01	<W 0.005	<T 0.020	<T 0.020	0.166	0.0186		
OCT 10,88	OCT 9,88	2.64	0.38	0.570	0.160	0.060	1.690	0.0095		
OCT 11,88	OCT 10,88	0.52	0.11	0.100	0.090	0.030	0.810	UG 0.0001		
OCT 12,88	OCT 11,88	0.12	<T 0.02	0.040	0.115	<T 0.020	LG 0.126	UG 0.0001		
OCT 13,88	OCT 12,88	<T 0.04	0.11	<T 0.015	<T 0.010	0.060	0.160	0.0037		
OCT 16,88	OCT 15,88	1.24	0.30	0.155	0.125	UG 0.235	0.966	0.0759		
OCT 17,88	OCT 16,88	0.78	0.24	0.160	0.085	0.070	0.486	0.0288		
OCT 18,88	OCT 17,88	<T 0.06	<T 0.03	<T 0.010	<T 0.020	0.025	0.146	0.0347		
OCT 20,88	OCT 19,88	0.50	0.29	0.095	0.035	0.025	0.906	0.0037		
OCT 22,88	OCT 21,88	0.14	0.17	<T 0.015	0.025	<T 0.015	0.386	0.0912		
OCT 24,88	OCT 23,88	0.12	0.06	<T 0.015	0.030	0.025	0.306	0.0575		
OCT 25,88	OCT 24,88	0.34	0.17	0.060	0.050	<T 0.020	0.396	0.0295		
OCT 26,88	OCT 25,88	0.40	0.56	0.060	0.040	0.050	1.100	0.0347		
OCT 28,88	OCT 27,88	1.22	0.39	0.145	0.065	0.070	0.636	0.1413		
NOV 1,88	OCT 31,88	!IS *****	0.24	!IS *****	!IS *****	!IS *****	0.440	0.0955		
NOV 2,88	NOV 1,88	D 2.02	0.80	D 0.355	D 0.155	D 0.135	1.570	0.0427		
NOV 4,88	NOV 3,88	0.32	0.24	0.040	D 0.055	0.075	0.770	D 0.1445		
NOV 5,88	NOV 4,88	0.10	0.20	0.035	0.050	0.085	<W 0.006	0.0513		
NOV 6,88	NOV 5,88	<T 0.04	0.06	<T 0.015	<T 0.015	<T 0.015	0.256	0.0437		
NOV 7,88	NOV 6,88	<T 0.10	<T 0.04	D 0.025	<W 0.005	<T 0.015	0.090	0.0282		
NOV 8,88	NOV 7,88	0.20	0.10	<T 0.025	<T 0.015	<T 0.020	LG 0.040	0.0490		
NOV 9,88	NOV 8,88	!IS *****	D 0.64	!IS *****	!IS *****	!IS *****	D 0.800	!IS *****		
NOV 10,88	NOV 9,88	<T 0.10	0.14	<T 0.015	<T 0.010	0.045	D 0.106	D 0.0513		
NOV 13,88	NOV 12,88	<T 0.06	0.10	<T 0.010	<T 0.015	<T 0.025	D 0.226	0.0525		
NOV 17,88	NOV 16,88	0.72	0.40	0.090	0.060	0.135	D 0.420	0.0513		
NOV 20,88	NOV 19,88	<T 0.04	0.08	<T 0.005	<T 0.020	<T 0.020	0.130	0.0490		
NOV 21,88	NOV 20,88	<T 0.04	<T 0.03	<W 0.005	<T 0.015	<T 0.010	0.140	0.0372		
NOV 22,88	NOV 21,88	!IS *****	!IS *****	!IS *****	!IS *****	!IS *****	LG 0.030	0.0126		
NOV 27,88	NOV 26,88	0.78	0.70	0.220	0.140	!CR *****	0.796	0.1514		
DEC 1,88	NOV 30,88	0.72	D 0.63	0.140	0.065	D 0.270	0.840	0.0219		
DEC 2,88	DEC 1,88	*****	*****	*****	*****	*****	*****	*****		
DEC 9,88	DEC 8,88	*****	*****	*****	*****	*****	*****	*****		

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : MELBOURNE/DAILY/AEROCHEM

#01

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REMOVAL DATE	EXPOSURE DATE	SAMPLING START/END HR. HR.	PRECIP START/END HR. HR.	SAMPLE TYPE 01-RAIN 02-SNOW 03-COMP/04-OTHER	GAUGE DEPTH(MM)	GAUGE TYPE 01-STD. 02-NIPHER	SAMPLE NUMBER	PROJECT CODE 02-APIOS 03-SPECIAL	SUBPROJECT CODE 01-MOE 03-AES	SAMPLER EFFICI- ENCY (%)	COMMENTS FIELD OFFICE
DEC 11,88	DEC 10,88	800 800	**** ****	2	0.3	2	61652	2	1	****	E N
DEC 13,88	DEC 12,88	800 800	**** ****	2	1.6	2	61653	2	1	53	
DEC 18,88	DEC 17,88	800 800	1800 2000	2	2.8	2	61654	2	1	76	J
DEC 19,88	DEC 18,88	800 800	1900 2200	1	0.1	2	61655	2	1	****	E N
DEC 21,88	DEC 20,88	800 800	1400 1900	3	1.6	2	61656	2	1	119	CD J
DEC 23,88	DEC 22,88	800 800	2100 400	3	11.2	2	61657	2	1	108	J
DEC 24,88	DEC 23,88	800 1800	1500 1800	3	4.2	2	61658	2	1	117	J
DEC 27,88	DEC 26,88	800 1030	500 700	3	5.2	2	61659	2	1	180	NJ
DEC 28,88	DEC 27,88	1030 1030	**** ****	1	****	2	61660	2	1	****	J
DEC 30,88	DEC 29,88	800 800	**** ****	3	0.2	2	61661	2	1	****	E N

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REMOVAL DATE	EXPOSURE DATE	VOLUME ML	CONDUCT. UMHO/CM		PH FIELD	PH LAB	TOTAL H+ TO PH8.3 MG/L	TOTAL H+ GRAN MG/L	SULPHATE MG/L	NITRATE AS N MG/L
DEC 11,88	DEC 10,88	*****	*****		*****	*****	*****	*****	*****	*****
DEC 13,88	DEC 12,88	55.0	?IS *****		*****	UG 8.11	*****	<W 0.0010	0.60	1.04
DEC 18,88	DEC 17,88	138.0	?IS *****		4.42	5.37	*****	0.0241	2.30	1.15
DEC 19,88	DEC 18,88	*****	*****		*****	*****	*****	*****	*****	*****
DEC 21,88	DEC 20,88	123.0	30.0	UG	5.27	UG 6.92	*****	0.0230	5.15	0.98
DEC 23,88	DEC 22,88	780.0	29.5	LG	3.38	4.19	*****	0.0890	2.75	0.41
DEC 24,88	DEC 23,88	317.0	13.5		3.69	D 4.57	*****	D 0.0468	1.60	0.26
DEC 27,88	DEC 26,88	602.0	42.5	LG	3.37	4.03	*****	0.1250	4.50	0.24
DEC 28,88	DEC 27,88	692.0	23.0		3.54	4.28	*****	0.0730	1.75	0.38
DEC 30,88	DEC 29,88	*****	*****		*****	*****	*****	*****	*****	*****

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ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : NORTH EASTHOPE/DAILY/AEROCHEM #03

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REMOVAL DATE	EXPOSURE DATE	SAMPLING START/END HR. HR.	PRECIP START/END HR. HR.	SAMPLE TYPE 01-RAIN 02-SNOW 03-COMP/04-OTHER	GAUGE DEPTH(MM)	GAUGE TYPE 01-STD. 02-NIPHER	SAMPLE NUMBER	PROJECT CODE 02-APIOS 03-SPECIAL	SUBPROJECT CODE 01-MOE 03-AES	SAMPLER EFFICI- ENCY (%)	COMMENTS FIELD OFFICE
JAN 1,88	DEC 31,87	800 900	2400 900	2	0.6	2	63822	2	1	38	N
JAN 2,88	JAN 1,88	900 930	900 930	2	1.0	2	63823	2	1	18	N
JAN 4,88	JAN 3,88	800 700	100 200	2	0.6	2	63824	2	1	38	N
JAN 5,88	JAN 4,88	700 800	800 100	2	6.0	2	63825	2	1	33	NCM
JAN 6,88	JAN 5,88	800 800	900 1100	2	2.8	2	63826	2	1	22	N
JAN 7,88	JAN 6,88	800 800	1300 2100	2	2.6	2	63827	2	1	59	C
JAN 9,88	JAN 8,88	800 800	****	2	0.7	2	63828	2	1	57	
JAN 10,88	JAN 9,88	800 800	1200 1400	2	0.4	2	63829	2	1	117	X
JAN 13,88	JAN 12,88	800 800	600 2400	3	2.2	2	63830	2	1	70	
JAN 14,88	JAN 13,88	800 800	900 1500	2	0.7	2	63831	2	1	U 4	GE
JAN 15,88	JAN 14,88	800 800	**** 400	2	0.9	2	63832	2	1	3	E
JAN 16,88	JAN 15,88	800 800	830 1200	2	0.5	2	63833	2	1	****	EF
JAN 17,88	JAN 16,88	830 900	100 900	1	2.4	2	63834	2	1	117	
JAN 18,88	JAN 17,88	900 800	900 800	1	10.1	2	63835	2	1	99	
JAN 19,88	JAN 18,88	800 800	800 1200	1	0.6	2	63836	2	1	106	
JAN 20,88	JAN 19,88	800 800	100 400	1	3.3	2	63837	2	1	95	
JAN 21,88	JAN 20,88	800 800	2100 800	2	1.8	2	63838	2	1	70	
JAN 22,88	JAN 21,88	800 800	800 1200	2	0.3	2	63839	2	1	****	E
JAN 23,88	JAN 22,88	800 800	1200 1500	2	0.5	2	63840	2	1	12	XN
JAN 24,88	JAN 23,88	800 1000	2400 1000	2	2.5	2	63841	2	1	28	N
JAN 25,88	JAN 24,88	1000 800	1000 1300	2	0.7	2	63842	2	1	8	XN
JAN 26,88	JAN 25,88	800 800	1200 100	2	0.4	2	63843	2	1	11	E
JAN 28,88	JAN 27,88	800 800	2100 100	2	1.5	2	63844	2	1	11	NHM
FEB 1,88	JAN 31,88	800 800	1030 2200	1	12.2	2	63845	2	1	109	
FEB 2,88	FEB 1,88	800 800	1200 1700	3	12.5	2	63848	2	1	22	N
FEB 4,88	FEB 3,88	800 800	2000 2400	2	4.8	2	63849	2	1	55	M
FEB 5,88	FEB 4,88	800 800	1000 1700	2	0.8	2	63850	2	1	3	E
FEB 6,88	FEB 5,88	800 800	900 2400	2	5.4	2	63851	2	1	23	NH
FEB 7,88	FEB 6,88	800 800	900 2400	2	1.9	2	63852	2	1	13	NHCM
FEB 8,88	FEB 7,88	800 800	1000 2400	2	6.4	2	63853	2	1	23	N
FEB 10,88	FEB 9,88	700 800	700 1100	2	2.7	2	63854	2	1	15	N
FEB 12,88	FEB 11,88	800 800	1200 100	2	20.1	2	63855	2	1	61	
FEB 13,88	FEB 12,88	800 800	1200 800	2	2.4	2	63856	2	1	12	N
FEB 14,88	FEB 13,88	800 800	800 1700	2	0.5	2	63857	2	1	9	XN
FEB 15,88	FEB 14,88	800 800	****	1	5.1	2	63858	2	1	108	
FEB 17,88	FEB 16,88	800 800	****	2	0.8	2	63862	2	1	****	E
FEB 20,88	FEB 19,88	800 800	1200 200	3	14.3	2	63859	2	1	90	N
FEB 21,88	FEB 20,88	800 800	900 2000	2	7.2	2	63860	2	1	41	N
FEB 23,88	FEB 22,88	800 800	900 1200	3	0.6	2	63861	2	1	64	H
FEB 24,88	FEB 23,88	800 800	800 1600	2	1.2	2	63863	2	1	44	N

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : NORTH EASTHOPE/DAILY/AEROCHEM #03

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REMOVAL DATE	EXPOSURE DATE	VOLUME ML	CONDUCT. UMHO/CM	PH FIELD	PH LAB	TOTAL H+ TO PH8.3 MG/L	TOTAL H+ GRAM MG/L	SULPHATE MG/L	NITRATE AS N MG/L
JAN 1,88	DEC 31,87	15.0	40.5	*****	UG 7.57	*****	0.0121	4.45	0.98
JAN 2,88	JAN 1,88	12.0	19.0	*****	UG 7.46	*****	0.0125	LG 0.35	0.23
JAN 4,88	JAN 3,88	15.0	9.0	*****	UG 6.75	*****	0.0146	0.75	0.45
JAN 5,88	JAN 4,88	130.0	40.5	*****	UG 7.83	*****	0.0124	1.15	0.71
JAN 6,88	JAN 5,88	40.0	27.5	*****	UG 7.66	*****	0.0121	0.60	0.34
JAN 7,88	JAN 6,88	99.0	11.0	*****	UG 6.97	*****	0.0140	LG 0.35	0.13
JAN 9,88	JAN 8,88	26.0	17.5	*****	4.97	*****	0.0350	0.95	1.15
JAN 10,88	JAN 9,88	30.0	*****	*****	*****	*****	*****	*****	*****
JAN 13,88	JAN 12,88	99.0	54.0	3.99	4.18	*****	0.1080	6.65	1.72
JAN 14,88	JAN 13,88	2.0	*****	*****	*****	*****	*****	*****	*****
JAN 15,88	JAN 14,88	2.0	*****	*****	*****	*****	*****	*****	*****
JAN 16,88	JAN 15,88	*****	*****	*****	*****	*****	*****	*****	*****
JAN 17,88	JAN 16,88	181.0	23.5	4.07	4.31	*****	0.0704	2.00	0.54
JAN 18,88	JAN 17,88	645.0	30.5	3.98	4.15	*****	0.0957	2.00	0.63
JAN 19,88	JAN 18,88	41.0	65.5	*****	!IS *****	*****	!IS *****	3.40	1.96
JAN 20,88	JAN 19,88	203.0	36.0	3.79	4.14	*****	0.1130	3.15	0.89
JAN 21,88	JAN 20,88	81.0	13.0	*****	4.70	*****	0.0486	1.95	0.37
JAN 22,88	JAN 21,88	*****	*****	*****	*****	*****	*****	*****	*****
JAN 23,88	JAN 22,88	4.0	*****	*****	*****	*****	*****	*****	*****
JAN 24,88	JAN 23,88	45.0	19.5	*****	4.53	*****	0.0594	1.75	0.90
JAN 25,88	JAN 24,88	4.0	*****	*****	*****	*****	*****	*****	*****
JAN 26,88	JAN 25,88	3.0	*****	*****	*****	*****	*****	*****	*****
JAN 28,88	JAN 27,88	11.0	6.5	*****	6.27	*****	0.0172	0.55	0.43
FEB 1,88	JAN 31,88	858.0	21.5	4.35	4.45	*****	0.0633	2.50	0.28
FEB 2,88	FEB 1,88	183.0	15.5	4.65	4.82	*****	0.0413	2.65	0.24
FEB 4,88	FEB 3,88	170.0	7.5	4.73	4.93	*****	0.0344	LG 0.30	0.26
FEB 5,88	FEB 4,88	2.0	*****	*****	*****	*****	*****	*****	*****
FEB 6,88	FEB 5,88	83.0	9.0	*****	5.27	*****	0.0281	0.60	0.46
FEB 7,88	FEB 6,88	16.0	6.5	*****	UG 7.02	*****	0.0150	LG 0.45	0.19
FEB 8,88	FEB 7,88	96.0	17.5	*****	4.53	*****	0.0586	0.80	0.75
FEB 10,88	FEB 9,88	27.0	21.5	*****	4.43	*****	0.0687	0.90	0.84
FEB 12,88	FEB 11,88	798.0	47.0	3.99	4.04	*****	0.1370	2.45	1.22
FEB 13,88	FEB 12,88	19.0	6.0	*****	!IR *****	*****	0.0197	LG 0.40	0.16
FEB 14,88	FEB 13,88	3.0	*****	*****	*****	*****	*****	*****	*****
FEB 15,88	FEB 14,88	355.0	D 40.0	4.06	4.10	*****	0.1180	3.10	0.78
FEB 17,88	FEB 16,88	*****	*****	*****	*****	*****	*****	*****	*****
FEB 20,88	FEB 19,88	828.0	26.0	4.24	4.33	*****	0.0691	1.55	0.55
FEB 21,88	FEB 20,88	193.0	20.0	4.50	4.59	*****	0.0472	1.40	0.49
FEB 23,88	FEB 22,88	25.0	!IS *****	*****	UG 6.86	*****	0.0206	2.95	0.94
FEB 24,88	FEB 23,88	34.0	11.0	*****	UG 6.92	*****	0.0168	0.95	0.78

ONTARIO MINISTRY OF THE ENVIRONMENT
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APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : NORTH EASTHOPE/DAILY/AEROCHEM #03

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REMOVAL DATE	EXPOSURE DATE	CALCIUM MG/L	CHLORIDE MG/L	MAGNESIM MG/L	POTASSIM MG/L	SODIUM MG/L	AMMONIUM AS N MG/L	FREE H+ LAB MG/L
JAN 1,88	DEC 31,87	!IS *****	0.42	!IS *****	!IS *****	!IS *****	0.620	UG 0.0000
JAN 2,88	JAN 1,88	!IS *****	0.21	!IS *****	!IS *****	!IS *****	LG 0.045	UG 0.0000
JAN 4,88	JAN 3,88	!IS *****	0.25	!IS *****	!IS *****	!IS *****	0.125	UG 0.0002
JAN 5,88	JAN 4,88	UG 4.18	0.46	UG 0.815	0.120	0.140	0.195	UG 0.0000
JAN 6,88	JAN 5,88	!IS *****	0.37	!IS *****	!IS *****	!IS *****	0.130	UG 0.0000
JAN 7,88	JAN 6,88	1.00	0.16	0.190	<T 0.015	0.085	0.120	UG 0.0001
JAN 9,88	JAN 8,88	!IS *****	0.37	!IS *****	!IS *****	!IS *****	0.205	0.0107
JAN 10,88	JAN 9,88	*****	*****	*****	*****	*****	*****	*****
JAN 13,88	JAN 12,88	1.46	0.52	0.290	0.075	0.135	1.520	0.0661
JAN 14,88	JAN 13,88	*****	*****	*****	*****	*****	*****	*****
JAN 15,88	JAN 14,88	*****	*****	*****	*****	*****	*****	*****
JAN 16,88	JAN 15,88	*****	*****	*****	*****	*****	*****	*****
JAN 17,88	JAN 16,88	0.24	0.18	0.035	<T 0.020	0.075	0.280	0.0490
JAN 18,88	JAN 17,88	<T 0.10	0.17	<T 0.010	<T 0.020	0.035	0.230	0.0708
JAN 19,88	JAN 18,88	0.22	0.46	<T 0.020	0.035	0.050	1.130	!IS *****
JAN 20,88	JAN 19,88	0.26	0.22	0.030	<T 0.015	0.050	0.400	0.0724
JAN 21,88	JAN 20,88	0.22	0.09	0.055	<T 0.010	0.050	0.310	0.0200
JAN 22,88	JAN 21,88	*****	*****	*****	*****	*****	*****	*****
JAN 23,88	JAN 22,88	*****	*****	*****	*****	*****	*****	*****
JAN 24,88	JAN 23,88	!IS *****	0.46	!IS *****	!IS *****	!IS *****	0.370	0.0295
JAN 25,88	JAN 24,88	*****	*****	*****	*****	*****	*****	*****
JAN 26,88	JAN 25,88	*****	*****	*****	*****	*****	*****	*****
JAN 28,88	JAN 27,88	0.46	0.37	0.070	0.065	0.250	0.080	0.0005
FEB 1,88	JAN 31,88	0.22	0.51	0.055	<T 0.015	0.300	0.290	0.0355
FEB 2,88	FEB 1,88	0.14	0.10	0.030	0.025	0.100	0.600	0.0151
FEB 4,88	FEB 3,88	<T 0.08	0.07	<T 0.015	<W 0.005	<T 0.020	LG 0.050	0.0117
FEB 5,88	FEB 4,88	*****	*****	*****	*****	*****	*****	*****
FEB 6,88	FEB 5,88	0.42	0.26	0.095	<T 0.015	0.115	0.100	0.0054
FEB 7,88	FEB 6,88	0.34	0.16	0.065	<T 0.015	0.085	0.090	UG 0.0001
FEB 8,88	FEB 7,88	0.50	0.21	0.075	<T 0.015	0.060	0.210	0.0295
FEB 10,88	FEB 9,88	0.36	0.35	0.055	<T 0.010	0.140	0.220	0.0372
FEB 12,88	FEB 11,88	0.20	0.40	0.035	<T 0.015	0.095	0.390	0.0912
FEB 13,88	FEB 12,88	<T 0.08	<T 0.04	<T 0.015	<T 0.005	0.035	0.070	!IR *****
FEB 14,88	FEB 13,88	*****	*****	*****	*****	*****	*****	*****
FEB 15,88	FEB 14,88	0.24	0.22	0.035	<T 0.020	0.135	0.390	0.0794
FEB 17,88	FEB 16,88	*****	*****	*****	*****	*****	*****	*****
FEB 20,88	FEB 19,88	<T 0.08	0.09	<T 0.015	<T 0.005	0.040	0.280	0.0468
FEB 21,88	FEB 20,88	0.10	0.13	<T 0.020	<T 0.010	0.035	0.460	0.0257
FEB 23,88	FEB 22,88	1.24	0.47	0.170	0.070	0.300	0.900	UG 0.0001
FEB 24,88	FEB 23,88	!IS *****	D 0.48	!IS *****	!IS *****	!IS *****	0.220	UG 0.0001

ONTARIO MINISTRY OF THE ENVIRONMENT
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STATION NAME : NORTH EASTHOPE/DAILY/AEROCHEM #03

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REMOVAL DATE	EXPOSURE DATE	SAMPLING START/END HR. HR.	PRECIP START/END HR. HR.	SAMPLE TYPE 01-RAIN 02-SNOW 03-COMP/04-OTHER	GAUGE DEPTH(MM)	GAUGE TYPE 01-STD. 02-NIPHER	SAMPLE NUMBER	PROJECT CODE 02-APIOS 03-SPECIAL	SUBPROJECT CODE 01-MOE 03-AES	SAMPLER EFFICI- ENCY (%)	COMMENTS FIELD OFFICE
FEB 25,88	FEB 24,88	800 800	900 2200	2	3.4	2	63864	2	1	57	JHM
FEB 27,88	FEB 26,88	800 800	300 700	2	1.0	2	63865	2	1	21	NHM
MAR 9,88	MAR 8,88	800 800	200 800	1	1.4	2	63866	2	1	172	NH
MAR 12,88	MAR 11,88	800 800	****	3	10.2	2	63867	2	1	94	
MAR 14,88	MAR 13,88	800 800	100 300	2	3.0	2	63868	2	1	42	N
MAR 15,88	MAR 14,88	800 800	2100 100	2	0.8	2	63869	2	1	19	N
MAR 18,88	MAR 17,88	800 800	2400 800	2	0.5	2	63870	2	1	59	
MAR 19,88	MAR 18,88	800 800	800 100	2	3.9	2	63871	2	1	60	J
MAR 20,88	MAR 19,88	800 800	1400 100	2	4.1	2	63872	2	1	49	NJ
MAR 21,88	MAR 20,88	800 800	1500 1800	2	0.4	2	63873	2	1	39	NHCM
MAR 24,88	MAR 23,88	800 800	1900 100	1	6.1	2	63874	2	1	112	J
MAR 25,88	MAR 24,88	800 800	2000 100	1	0.3	2	63875	2	1	93	C
MAR 26,88	MAR 25,88	800 900	1000 1500	1	14.0	2	63876	2	1	107	C
MAR 27,88	MAR 26,88	900 900	1400 1800	1	3.4	2	63879	2	1	113	J
MAR 28,88	MAR 27,88	900 800	1000 1300	3	1.1	2	63880	2	1	14	NHCM
MAR 29,88	MAR 28,88	800 800	2300 200	1	0.5	1	63881	2	1	165	N
APR 2,88	APR 1,88	800 800	100 700	1	0.9	2	63882	2	1	91	
APR 3,88	APR 2,88	800 1000	100 800	1	29.2	1	63883	2	1	105	
APR 4,88	APR 3,88	1000 700	200 700	1	6.0	1	63884	2	1	94	
APR 5,88	APR 4,88	800 800	800 900	1	0.3	1	63885	2	1	****	E
APR 8,88	APR 7,88	800 800	1900 ****	1	0.9	1	63886	2	1	72	N
APR 14,88	APR 13,88	800 800	****	3	12.4	1	63887	2	1	61	
APR 18,88	APR 17,88	800 800	2200 ****	1	7.9	1	63888	2	1	96	H
APR 21,88	APR 20,88	800 800	1000 2100	1	10.2	1	63889	2	1	94	J
APR 23,88	APR 22,88	800 800	30 745	1	9.6	1	63890	2	1	107	JH
APR 24,88	APR 23,88	800 800	****	1	0.7	1	63891	2	1	U 127	G
APR 27,88	APR 26,88	800 800	900 1100	1	2.2	1	63892	2	1	80	JH
APR 28,88	APR 27,88	800 800	****	1	3.8	1	63893	2	1	90	J
APR 29,88	APR 28,88	800 800	****	1	1.2	1	63894	2	1	66	
APR 30,88	APR 29,88	800 800	1600 1900	1	5.6	1	63895	2	1	83	J
MAY 9,88	MAY 8,88	800 730	2300 730	1	0.3	1	63896	2	1	36	N
MAY 10,88	MAY 9,88	730 800	730 1000	1	17.0	1	63897	2	1	95	NJ
MAY 11,88	MAY 10,88	800 800	1000 1200	1	1.4	1	63900	2	1	78	H
MAY 14,88	MAY 13,88	800 800	830 1030	1	3.8	1	63901	2	1	88	J
MAY 16,88	MAY 15,88	800 800	900 1200	1	22.9	1	63902	2	1	100	C
MAY 17,88	MAY 16,88	800 800	900 1200	1	9.6	1	63903	2	1	96	NJ
MAY 19,88	MAY 18,88	800 800	2000 2300	1	2.0	1	63904	2	1	101	JHM
MAY 20,88	MAY 19,88	800 800	****	1	1.0	1	63905	2	1	63	HCM
MAY 22,88	MAY 20,88	800 800	****	1	8.2	1	63906	2	1	93	Y2
JUN 2,88	JUN 1,88	800 800	1900 2300	1	1.0	1	63907	2	1	81	

ONTARIO MINISTRY OF THE ENVIRONMENT
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STATION NAME : NORTH EASTHOPE/DAILY/AEROCHEM #03

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REMOVAL DATE	EXPOSURE DATE	VOLUME ML	CONDUCT. UMHO/CM		PH FIELD	PH LAB	TOTAL H+ TO PH8.3 MG/L	TOTAL H+ GRAN MG/L	SULPHATE MG/L	NITRATE AS N MG/L	
FEB 25,88	FEB 24,88	126.0	7.5	UG	5.36	UG	7.15	*****	0.0137	0.70	0.53
FEB 27,88	FEB 26,88	14.0	7.5		*****	UG	7.06	*****	0.0162	0.80	0.40
MAR 9,88	MAR 8,88	155.0	27.5		4.49		4.66	*****	0.0518	3.20	0.97
MAR 12,88	MAR 11,88	618.0	28.5		4.41		4.53	*****	0.0559	3.40	0.62
MAR 14,88	MAR 13,88	82.0	23.5		*****		4.51	*****	0.0539	2.20	0.44
MAR 15,88	MAR 14,88	10.0	!IR *****		*****	!IR *****	*****	!IR *****	!IS *****	!IR *****	
MAR 18,88	MAR 17,88	19.0	LG 5.0		*****		6.53	*****	0.0149	LG 0.35	0.22
MAR 19,88	MAR 18,88	151.0	39.0		3.88		4.33	*****	0.0765	2.75	1.31
MAR 20,88	MAR 19,88	131.0	10.5		4.54		5.12	*****	0.0256	0.75	0.38
MAR 21,88	MAR 20,88	10.0	LG 3.5		*****		6.59	*****	0.0148	<T 0.25	LG 0.07
MAR 24,88	MAR 23,88	440.0	33.5	UG	5.28	UG	6.88	*****	0.0227	5.35	1.23
MAR 25,88	MAR 24,88	18.0	21.0		*****		4.51	*****	0.0539	2.65	0.39
MAR 26,88	MAR 25,88	961.0	17.5		4.58		4.80	*****	0.0361	2.30	0.38
MAR 27,88	MAR 26,88	248.0	18.0	UG	5.42		6.20	*****	0.0207	3.15	0.58
MAR 28,88	MAR 27,88	10.0	LG 3.5		*****	UG	6.71	*****	0.0137	LG 0.40	LG 0.05
MAR 29,88	MAR 28,88	53.0	54.0		*****	D	4.15	*****	0.1150	8.20	0.66
APR 2,88	APR 1,88	53.0	40.0		*****	D	4.38	*****	0.0759	7.45	0.84
APR 3,88	APR 2,88	1966.0	25.0		4.05		4.35	*****	0.0691	2.40	0.24
APR 4,88	APR 3,88	365.0	20.5		4.16		4.49	*****	0.0549	1.85	0.28
APR 5,88	APR 4,88	*****	*****		*****	*****	*****	*****	*****	*****	*****
APR 8,88	APR 7,88	42.0	80.5		*****		3.81	*****	0.2110	UG 11.50	2.55
APR 14,88	APR 13,88	486.0	28.0		4.60		5.02	*****	0.0419	4.15	1.34
APR 18,88	APR 17,88	488.0	25.5	UG	6.29	UG	7.19	*****	0.0224	3.60	0.78
APR 21,88	APR 20,88	621.0	12.0	UG	5.25	UG	6.83	*****	0.0202	1.55	0.38
APR 23,88	APR 22,88	663.0	21.0	LG	3.42		4.51	*****	0.0582	2.90	0.31
APR 24,88	APR 23,88	57.0	!RE *****		*****	!RE *****	*****	!RE *****	!RE *****	!RE *****	
APR 27,88	APR 26,88	114.0	27.5		4.33	D	5.65	*****	0.0306	5.15	0.90
APR 28,88	APR 27,88	220.0	59.5		3.61		4.18	*****	0.1150	7.90	1.51
APR 29,88	APR 28,88	51.0	35.5		*****		4.62	*****	0.0621	4.90	1.21
APR 30,88	APR 29,88	299.0	13.5		4.19		5.21	*****	0.0311	3.00	0.18
MAY 9,88	MAY 8,88	7.0	*****		*****	*****	*****	*****	*****	*****	*****
MAY 10,88	MAY 9,88	1045.0	14.0		3.62		4.83	*****	0.0422	2.25	0.30
MAY 11,88	MAY 10,88	70.0	28.0		*****		4.98	*****	D 0.0391	4.55	0.89
MAY 14,88	MAY 13,88	216.0	33.0	UG	5.46	UG	7.07	*****	0.0169	5.60	1.01
MAY 16,88	MAY 15,88	1478.0	34.5	D	3.63		4.35	*****	0.0816	4.40	0.64
MAY 17,88	MAY 16,88	591.0	14.0	D	4.29	UG	7.04	*****	0.0175	1.75	0.57
MAY 19,88	MAY 18,88	130.0	7.5		*****	UG	7.11	*****	0.0120	LG 0.60	0.25
MAY 20,88	MAY 19,88	41.0	15.0		*****		5.65	*****	0.0271	3.20	0.37
MAY 22,88	MAY 20,88	491.0	31.0		*****		4.29	*****	0.0772	3.30	0.54
MAY 23,88	JUN 1,88	52.0	D 47.5		*****	!IS *****	*****	!IS *****	7.00		0.84

ONTARIO MINISTRY OF THE ENVIRONMENT
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REMOVAL DATE	EXPOSURE DATE	CALCIUM MG/L	CHLORIDE MG/L	MAGNESIUM MG/L	POTASSIUM MG/L	SODIUM MG/L	AMMONIUM AS N MG/L	FREE H+ LAB MG/L
FEB 25,88	FEB 24,88	0.66	0.32	0.125	<T 0.010	0.090	0.210	UG 0.0001
FEB 27,88	FEB 26,88	0.84	0.33	0.125	<T 0.015	0.130	0.200	UG 0.0001
MAR 9,88	MAR 8,88	1.00	0.43	0.135	0.080	0.235	0.860	0.0219
MAR 12,88	MAR 11,88	0.72	0.29	0.110	0.070	0.140	0.570	0.0295
MAR 14,88	MAR 13,88	0.16	0.10	0.035	<T 0.010	0.045	0.480	0.0309
MAR 15,88	MAR 14,88	!IR *****	!IR *****	!IR *****	!IR *****	!IR *****	!IR *****	!IR *****
MAR 18,88	MAR 17,88	!IS *****	0.08	!IS *****	!IS *****	!IS *****	0.130	0.0003
MAR 19,88	MAR 18,88	0.30	0.44	0.060	<T 0.020	0.060	1.210	0.0468
MAR 20,88	MAR 19,88	0.18	D 0.27	0.035	<T 0.005	0.050	0.360	0.0076
MAR 21,88	MAR 20,88	<T 0.02	0.08	<T 0.005	<W 0.005	0.045	0.170	0.0003
MAR 24,88	MAR 23,88	1.64	0.54	0.360	0.080	0.310	1.680	UG 0.0001
MAR 25,88	MAR 24,88	0.40	0.18	0.055	<T 0.025	0.105	0.450	0.0309
MAR 26,88	MAR 25,88	0.36	0.14	0.045	0.035	0.145	0.460	0.0158
MAR 27,88	MAR 26,88	0.60	0.15	0.105	0.155	0.060	1.050	0.0006
MAR 28,88	MAR 27,88	<T 0.10	0.05	<T 0.010	<W 0.005	0.035	0.180	UG 0.0002
MAR 29,88	MAR 28,88	1.02	0.23	0.150	0.070	0.220	0.920	D 0.0708
APR 2,88	APR 1,88	1.78	0.42	0.315	0.185	0.340	0.750	D 0.0417
APR 3,88	APR 2,88	0.18	0.14	0.030	<T 0.025	0.095	0.230	0.0447
APR 4,88	APR 3,88	0.18	<T 0.02	<T 0.015	<T 0.020	0.035	0.310	0.0324
APR 5,88	APR 4,88	*****	*****	*****	*****	*****	*****	*****
APR 8,88	APR 7,88	!IS *****	0.66	!IS *****	!IS *****	!IS *****	!IS *****	0.1549
APR 14,88	APR 13,88	1.32	0.28	0.305	0.055	0.135	1.450	0.0095
APR 18,88	APR 17,88	1.14	0.14	0.275	0.070	0.125	1.580	UG 0.0001
APR 21,88	APR 20,88	0.58	0.06	0.095	<T 0.025	<T 0.020	0.610	UG 0.0001
APR 23,88	APR 22,88	0.74	0.10	0.065	0.035	0.050	0.300	0.0309
APR 24,88	APR 23,88	!IS *****	!RE *****	!IS *****	!IS *****	!IS *****	!RE *****	!RE *****
APR 27,88	APR 26,88	0.34	0.09	0.075	0.040	0.060	2.120	D 0.0022
APR 28,88	APR 27,88	1.48	0.39	0.355	0.060	0.045	1.420	0.0661
APR 29,88	APR 28,88	0.50	0.16	0.110	0.040	0.030	1.800	0.0240
APR 30,88	APR 29,88	0.22	0.07	0.065	<T 0.020	0.040	0.690	0.0062
MAY 9,88	MAY 8,88	*****	*****	*****	*****	*****	*****	*****
MAY 10,88	MAY 9,88	0.24	0.10	0.060	0.040	<T 0.015	0.400	0.0148
MAY 11,88	MAY 10,88	0.42	0.23	0.085	0.080	0.040	1.600	0.0105
MAY 14,88	MAY 13,88	1.18	0.17	0.195	0.175	0.155	2.050	UG 0.0001
MAY 16,88	MAY 15,88	0.52	0.16	0.080	0.055	0.025	0.725	0.0447
MAY 17,88	MAY 16,88	0.84	0.10	0.180	0.105	0.040	0.600	UG 0.0001
MAY 19,88	MAY 18,88	0.44	0.06	0.075	0.040	0.030	0.316	UG 0.0001
MAY 20,88	MAY 19,88	!IS *****	0.15	!IS *****	!IS *****	!IS *****	0.784	0.0022
MAY 22,88	MAY 20,88	<T 0.10	0.07	<T 0.015	<T 0.020	<T 0.010	0.618	0.0513
MAY 23,88	MAY 21,88	3.04	0.54	0.765	UG 1.100	UG 0.335	1.660	!IS *****

ONTARIO MINISTRY OF THE ENVIRONMENT
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REMOVAL DATE	EXPOSURE DATE	SAMPLING START/END HR. HR.	PRECIP START/END HR. HR.	SAMPLE TYPE 01-RAIN 02-SNOW 03-COMP/04-OTHER	GAUGE DEPTH(MM)	GAUGE TYPE 01-STD. 02-NIPHER	SAMPLE NUMBER	PROJECT CODE 02-APIOS 03-SPECIAL	SUBPROJECT CODE 01-MOE 03-AES	SAMPLER EFFICI- ENCY (%)	COMMENTS FIELD OFFICE
JUN 9,88	JUN 8,88	800 800	1500 1600	1	1.2	1	63908	2	1	76	
JUN 16,88	JUN 15,88	800 800	1900 45	1	3.9	1	63909	2	1	96	J
JUN 29,88	JUN 28,88	800 800	1800 1900	1	0.8	1	63911	2	1	70	
JUL 11,88	JUL 10,88	800 700	2200 ****	1	2.4	1	63912	2	1	98	J
JUL 12,88	JUL 11,88	700 800	1900 100	1	20.8	1	63913	2	1	101	J
JUL 16,88	JUL 15,88	800 800	350 500	1	25.2	1	63916	2	1	104	J
JUL 17,88	JUL 16,88	800 800	2250 600	1	38.4	1	63917	2	1	104	J
JUL 21,88	JUL 20,88	800 800	**** ****	1	0.5	1	63918	2	1	53	
JUL 22,88	JUL 21,88	800 800	1900 2000	1	1.3	1	63919	2	1	94	
JUL 24,88	JUL 22,88	800 800	**** ****	1	12.9	1	63920	2	1	104	JY2
JUL 25,88	JUL 24,88	800 800	1400 1500	1	1.8	1	63921	2	1	78	
JUL 26,88	JUL 25,88	800 800	1800 2000	1	1.4	1	63922	2	1	81	
JUL 28,88	JUL 27,88	800 800	**** ****	1	1.2	1	63923	2	1	55	
JUL 31,88	JUL 30,88	800 800	1100 ****	1	12.0	1	63925	2	1	96	
AUG 1,88	JUL 31,88	800 1000	700 950	1	5.0	1	63926	2	1	96	JH
AUG 5,88	AUG 4,88	800 800	1500 1600	1	4.0	1	63927	2	1	82	
AUG 6,88	AUG 5,88	800 800	1950 100	1	7.4	1	63928	2	1	97	
AUG 14,88	AUG 13,88	800 850	750 800	1	2.8	1	63929	2	1	74	J
AUG 15,88	AUG 14,88	850 800	**** ****	1	8.2	1	63930	2	1	100	J
AUG 24,88	AUG 23,88	800 800	1500 2400	1	3.2	1	63931	2	1	95	TC
AUG 26,88	AUG 25,88	800 700	2000 100	1	4.0	1	63932	2	1	83	JHM
AUG 27,88	AUG 26,88	700 800	800 1000	1	1.0	1	63933	2	1	34	HM
AUG 29,88	AUG 28,88	800 800	1000 1200	1	1.4	1	63934	2	1	78	HCM
SEP 3,88	SEP 2,88	800 800	100 800	1	21.4	1	63935	2	1	94	
SEP 4,88	SEP 3,88	800 800	1700 700	1	21.7	1	63938	2	1	96	
SEP 5,88	SEP 4,88	800 800	950 300	1	5.4	1	63939	2	1	75	M
SEP 13,88	SEP 12,88	800 800	100 300	1	3.2	1	63941	2	1	54	J
SEP 17,88	SEP 16,88	800 800	**** 400	1	2.2	1	63942	2	1	69	
SEP 18,88	SEP 17,88	800 800	2100 2300	1	5.2	1	63943	2	1	87	U G J
SEP 19,88	SEP 18,88	800 800	1800 2000	1	0.8	1	63944	2	1	48	
SEP 20,88	SEP 19,88	800 800	100 500	1	4.8	1	63945	2	1	89	
SEP 21,88	SEP 20,88	800 800	1600 2200	1	2.5	1	63946	2	1	69	JH
SEP 22,88	SEP 21,88	800 800	900 1100	1	0.8	1	63947	2	1	66	
SEP 23,88	SEP 22,88	800 800	2400 200	1	12.9	1	63948	2	1	93	
SEP 28,88	SEP 27,88	800 800	1900 2300	1	5.1	1	63949	2	1	98	
OCT 1,88	SEP 30,88	800 800	100 300	1	2.2	1	63950	2	1	65	
OCT 2,88	OCT 1,88	800 800	100 800	1	15.4	1	63951	2	1	98	
OCT 3,88	OCT 2,88	800 800	800 1200	1	8.6	1	63954	2	1	83	U G C
OCT 4,88	OCT 3,88	800 1200	1200 1800	1	2.0	1	63955	2	1	76	HM
OCT 6,88	OCT 5,88	800 800	1000 1400	1	1.8	1	63956	2	1	65	HCM

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REMOVAL DATE	EXPOSURE DATE	VOLUME ML	CONDUCT. UMHO/CM	PH FIELD	PH LAB	TOTAL H+ TO PH8.3 MG/L	TOTAL H+ GRAN MG/L	SULPHATE MG/L	NITRATE AS N MG/L
JUN 9,88	JUN 8,88	59.0	40.0	*****	ICR *****	*****	0.0091	5.75	0.62
JUN 16,88	JUN 15,88	242.0	45.0	4.38	UG 7.00	*****	0.0214	9.75	1.25
JUN 29,88	JUN 28,88	36.0	13.0	*****	UG 6.89	*****	0.0152	2.25	0.29
JUL 11,88	JUL 10,88	151.0	> 100.0	LG 3.03	3.58	*****	0.2890	15.00	1.46
JUL 12,88	JUL 11,88	1347.0	16.5	3.62	4.90	*****	0.0316	2.65	0.39
JUL 16,88	JUL 15,88	1680.0	48.5	3.62	4.06	*****	0.1040	5.20	1.00
JUL 17,88	JUL 16,88	2580.0	20.5	3.82	4.42	*****	0.0517	2.20	0.30
JUL 21,88	JUL 20,88	17.0	35.0	*****	UG 7.53	*****	0.0109	4.55	0.80
JUL 22,88	JUL 21,88	79.0	25.5	*****	UG 7.45	*****	0.0148	2.35	0.56
JUL 24,88	JUL 22,88	863.0	47.0	3.62	4.00	*****	0.1190	4.40	0.79
JUL 25,88	JUL 24,88	91.0	D 25.5	*****	D 4.79	*****	0.0398	3.55	0.86
JUL 26,88	JUL 25,88	73.0	72.0	*****	3.96	*****	0.1380	8.10	1.83
JUL 28,88	JUL 27,88	43.0	15.0	*****	UG 6.99	*****	0.0193	1.80	0.38
JUL 31,88	JUL 30,88	742.0	43.5	3.73	4.09	*****	D 0.1030	5.35	0.63
AUG 1,88	JUL 31,88	310.0	23.5	4.12	5.06	*****	0.0355	3.60	0.80
AUG 5,88	AUG 4,88	212.0	> 100.0	3.45	3.69	*****	0.2530	D 13.20	1.05
AUG 6,88	AUG 5,88	464.0	50.5	3.65	3.96	*****	0.1370	4.70	0.64
AUG 14,88	AUG 13,88	134.0	62.5	3.48	3.97	*****	0.1400	7.75	1.02
AUG 15,88	AUG 14,88	530.0	21.0	3.84	4.54	*****	0.0598	2.70	0.41
AUG 24,88	AUG 23,88	195.0	> 100.0	LG 3.13	3.39	*****	0.4010	15.00	1.85
AUG 26,88	AUG 25,88	214.0	D 16.5	4.63	5.52	*****	0.0255	3.10	0.64
AUG 27,88	AUG 26,88	22.0	LG 4.5	*****	B 6.89	*****	D 0.0158	0.90	LG 0.06
AUG 29,88	AUG 28,88	70.0	> 100.0	*****	3.57	*****	0.3000	10.30	UG 2.75
SEP 3,88	SEP 2,88	1290.0	64.0	3.69	3.85	*****	0.1860	6.80	0.75
SEP 4,88	SEP 3,88	1338.0	43.5	3.92	4.01	*****	0.1230	4.30	0.49
SEP 5,88	SEP 4,88	261.0	24.0	4.11	4.24	*****	0.0814	2.45	0.15
SEP 13,88	SEP 12,88	112.0	24.0	3.87	4.37	*****	0.0734	3.45	0.50
SEP 17,88	SEP 16,88	98.0	82.0	*****	3.82	*****	0.2140	9.75	1.66
SEP 18,88	SEP 17,88	292.0	22.0	4.04	4.45	*****	0.0669	3.40	0.44
SEP 19,88	SEP 18,88	25.0	37.0	*****	!IS *****	*****	!IS *****	5.95	1.21
SEP 20,88	SEP 19,88	276.0	40.5	3.81	4.10	*****	0.1220	6.10	0.61
SEP 21,88	SEP 20,88	111.0	14.5	4.75	5.32	*****	0.0287	3.30	0.38
SEP 22,88	SEP 21,88	34.0	6.0	*****	!IS *****	*****	!IS *****	0.90	LG 0.09
SEP 23,88	SEP 22,88	772.0	15.0	4.08	4.49	*****	0.0582	1.75	0.25
SEP 28,88	SEP 27,88	322.0	31.5	4.20	4.32	*****	0.0766	5.20	1.00
OCT 1,88	SEP 30,88	92.0	40.0	*****	4.06	*****	0.1130	5.00	0.99
OCT 2,88	OCT 1,88	976.0	14.5	4.36	4.48	*****	0.0535	1.95	0.32
OCT 3,88	OCT 2,88	463.0	10.0	4.45	4.57	*****	0.0496	1.80	<T 0.02
OCT 4,88	OCT 3,88	98.0	17.0	*****	UG 7.43	*****	0.0194	6.25	0.22
OCT 6,88	OCT 5,88	75.0	9.0	*****	UG 7.41	*****	0.0179	2.15	0.52

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REMOVAL DATE	EXPOSURE DATE	CALCIUM MG/L	CHLORIDE MG/L	MAGNESIUM MG/L	POTASSIUM MG/L	SODIUM MG/L	AMMONIUM AS N MG/L	FREE H+ LAB MG/L
JUN 9,88	JUN 8,88	D 2.88	0.32	D 0.700	0.185	0.055	1.540	!CR *****
JUN 16,88	JUN 15,88	3.38	0.33	0.730	0.170	0.190	1.540	UG 0.0001
JUN 29,88	JUN 28,88	!IS *****	0.15	!IS *****	!IS *****	!IS *****	!IS *****	UG 0.0001
JUL 11,88	JUL 10,88	1.38	0.38	0.355	0.070	0.055	0.838	0.2630
JUL 12,88	JUL 11,88	0.30	0.08	0.065	0.025	<T 0.015	0.706	0.0126
JUL 16,88	JUL 15,88	0.68	0.27	0.170	0.055	0.135	0.668	0.0871
JUL 17,88	JUL 16,88	0.10	0.09	0.030	<T 0.015	0.045	0.278	0.0380
JUL 21,88	JUL 20,88	2.66	0.37	0.665	0.060	0.045	!IS *****	UG 0.0000
JUL 22,88	JUL 21,88	1.92	0.21	0.305	0.085	0.045	1.320	UG 0.0000
JUL 24,88	JUL 22,88	0.32	0.17	0.070	0.045	<T 0.025	0.460	0.1000
JUL 25,88	JUL 24,88	0.62	0.26	D 0.180	0.085	0.025	1.140	D 0.0162
JUL 26,88	JUL 25,88	1.84	0.43	0.300	0.080	0.055	1.230	0.1096
JUL 28,88	JUL 27,88	!IS *****	0.11	!IS *****	!IS *****	!IS *****	D 1.330	UG 0.0001
JUL 31,88	JUL 30,88	0.50	0.13	0.080	0.040	0.030	0.720	0.0813
AUG 1,88	JUL 31,88	0.82	0.16	0.110	0.075	0.045	0.938	0.0087
AUG 5,88	AUG 4,88	0.80	0.37	0.145	0.050	0.045	1.410	0.2042
AUG 6,88	AUG 5,88	0.24	0.07	0.045	<T 0.015	<T 0.020	0.356	0.1096
AUG 14,88	AUG 13,88	1.08	0.30	0.190	0.065	0.110	0.786	0.1072
AUG 15,88	AUG 14,88	0.34	0.11	0.065	0.035	0.040	0.440	0.0288
AUG 24,88	AUG 23,88	0.46	UG 1.13	0.115	0.055	0.030	1.340	0.4074
AUG 26,88	AUG 25,88	0.65	0.13	0.148	0.071	0.054	0.490	0.0030
AUG 27,88	AUG 26,88	0.26	0.06	0.035	0.050	0.060	0.286	B 0.0001
AUG 29,88	AUG 28,88	1.78	0.60	0.310	0.225	0.050	1.700	0.2692
SEP 3,88	SEP 2,88	0.14	0.72	0.025	0.030	<T 0.020	0.700	0.1413
SEP 4,88	SEP 3,88	<W 0.02	0.67	<W 0.005	<T 0.025	<T 0.015	0.630	0.0977
SEP 5,88	SEP 4,88	<T 0.02	D 0.42	<T 0.010	<T 0.020	<T 0.005	0.400	0.0575
SEP 13,88	SEP 12,88	0.40	0.16	0.085	0.035	0.040	0.596	0.0427
SEP 17,88	SEP 16,88	0.80	0.28	0.150	0.105	0.050	1.700	0.1514
SEP 18,88	SEP 17,88	0.22	0.07	0.045	0.040	<T 0.020	0.866	0.0355
SEP 19,88	SEP 18,88	0.84	0.26	0.165	0.090	0.050	1.950	!IS *****
SEP 20,88	SEP 19,88	0.48	0.25	0.095	0.055	0.080	0.650	0.0794
SEP 21,88	SEP 20,88	0.18	0.15	0.035	0.030	<T 0.025	1.280	0.0048
SEP 22,88	SEP 21,88	!IS *****	<T 0.04	!IS *****	!IS *****	!IS *****	D 0.866	!IS *****
SEP 23,88	SEP 22,88	0.10	<T 0.04	<T 0.015	<T 0.010	0.025	0.270	0.0324
SEP 28,88	SEP 27,88	1.18	0.21	0.205	0.050	0.035	0.746	0.0479
OCT 1,88	SEP 30,88	0.48	0.25	0.140	0.040	0.075	0.776	0.0871
OCT 2,88	OCT 1,88	<T 0.08	0.07	<T 0.015	<T 0.015	0.035	0.276	0.0331
OCT 3,88	OCT 2,88	<W 0.02	<W 0.01	<W 0.005	<T 0.015	<T 0.010	0.230	0.0269
OCT 4,88	OCT 3,88	0.42	0.09	0.130	0.050	<T 0.025	1.890	UG 0.0000
OCT 6,88	OCT 5,88	0.52	0.22	0.090	0.030	0.025	0.830	UG 0.0000

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : NORTH EASTHOPE/DAILY/AEROCHEM #03

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REMOVAL DATE	EXPOSURE DATE	SAMPLING START/END HR. HR.	PRECIP START/END HR. HR.	SAMPLE TYPE 01-RAIN 02-SNOW 03-COMP/04-OTHER	GAUGE DEPTH(MM)	GAUGE TYPE 01-STD. 02-NIPHER	SAMPLE NUMBER	PROJECT CODE 02-APIOS 03-SPECIAL	SUBPROJECT CODE 01-MOE 03-AES	SAMPLER EFFICI- ENCY (%)	COMMENTS FIELD OFFICE
OCT 7,88	OCT 6,88	800 1800	1100 1800	1	3.8	1	63957	2	1	92	HM
OCT 9,88	OCT 8,88	800 800	1400 2000	1	2.1	1	63958	2	1	82	JHCM
OCT 11,88	OCT 10,88	800 700	950 100	1	38.3	1	63959	2	1	99	NC
OCT 12,88	OCT 11,88	700 800	900 100	3	3.6	1	63961	2	1	74	B JHM
OCT 13,88	OCT 12,88	800 800	1800 2400	3	****	1	63962	2	1	****	HCM
OCT 16,88	OCT 15,88	800 800	200 500	1	0.5	1	63963	2	1	49	N
OCT 17,88	OCT 16,88	800 800	1900 200	1	1.7	1	63964	2	1	84	H
OCT 18,88	OCT 17,88	800 600	1800 300	1	14.8	1	63965	2	1	95	B HCM
OCT 19,88	OCT 18,88	600 800	700 1800	1	1.4	1	63966	2	1	63	HCM
OCT 20,88	OCT 19,88	800 800	900 1600	1	1.0	1	63967	2	1	56	
OCT 22,88	OCT 21,88	800 800	1200 2400	1	4.6	1	63968	2	1	89	J
OCT 24,88	OCT 22,88	800 800	2400 100	1	7.4	1	63969	2	1	94	Y2
OCT 25,88	OCT 24,88	800 700	900 700	1	17.0	1	63970	2	1	94	NJHM
OCT 26,88	OCT 25,88	700 700	****	3	5.0	1	63973	2	1	81	J
OCT 27,88	OCT 26,88	700 800	700 1800	3	8.4	1	63974	2	1	87	JHM
OCT 28,88	OCT 27,88	800 800	100 800	3	7.8	1	63975	2	1	91	J
NOV 1,88	OCT 31,88	800 800	100 2000	1	1.4	1	63976	2	1	61	
NOV 2,88	NOV 1,88	800 800	1700 200	1	0.5	1	63977	2	1	40	N
NOV 4,88	NOV 3,88	800 800	300 600	1	2.2	1	63978	2	1	78	
NOV 5,88	NOV 4,88	800 800	900 100	1	4.2	1	63979	2	1	101	A
NOV 6,88	NOV 5,88	800 900	2100 900	1	17.3	1	63980	2	1	96	
NOV 7,88	NOV 6,88	900 800	900 300	3	4.0	1	63981	2	1	70	NCM
NOV 8,88	NOV 7,88	800 700	400 700	1	2.1	1	63982	2	1	130	HM
NOV 9,88	NOV 8,88	700 800	700 1200	1	7.4	2	63983	2	1	94	N
NOV 10,88	NOV 9,88	800 800	100 800	1	14.7	2	63984	2	1	102	
NOV 11,88	NOV 10,88	800 800	800 2300	1	2.9	2	63985	2	1	109	
NOV 13,88	NOV 12,88	800 1000	2300 1000	1	15.4	2	63986	2	1	100	
NOV 14,88	NOV 13,88	1000 800	1000 1200	1	0.5	2	63989	2	1	99	
NOV 17,88	NOV 16,88	800 800	900 1200	1	3.8	2	63991	2	1	148	
NOV 21,88	NOV 20,88	800 800	1000 100	1	20.5	2	63992	2	1	95	NJHCM
NOV 22,88	NOV 21,88	800 800	900 1100	1	0.1	2	63993	2	1	****	N
NOV 27,88	NOV 26,88	800 800	1800 100	1	2.3	2	63994	2	1	152	E N
NOV 29,88	NOV 28,88	800 800	900 100	2	2.2	2	63995	2	1	41	N
DEC 1,88	NOV 30,88	700 700	800 2400	2	2.6	2	3	2	1	60	NH
DEC 2,88	DEC 1,88	700 700	900 100	2	0.6	2	4	2	1	54	
DEC 4,88	DEC 3,88	800 800	1200 2300	2	0.1	2	5	2	1	****	E
DEC 8,88	DEC 7,88	800 720	100 715	2	0.5	2	6	2	1	49	
DEC 9,88	DEC 8,88	720 720	720 720	2	0.9	2	7	2	1	64	
DEC 10,88	DEC 9,88	720 720	720 1800	2	1.4	2	8	2	1	51	
DEC 11,88	DEC 10,88	730 900	100 100	2	1.1	2	9	2	1	24	

ONTARIO MINISTRY OF THE ENVIRONMENT
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REMOVAL DATE	EXPOSURE DATE	VOLUME ML	CONDUCT. UMHO/CM	PH FIELD	PH LAB	TOTAL H+ TO PH8.3 MG/L	TOTAL H+ GRAN MG/L	SULPHATE MG/L	NITRATE AS N MG/L				
OCT 7,88	OCT 6,88	225.0	15.5		4.26	D	4.46	*****	0.0611	D	2.30	<T	0.03
OCT 9,88	OCT 8,88	111.0	22.5	UG	5.81	UG	7.40	*****	0.0201		3.75		1.74
OCT 11,88	OCT 10,88	2454.0	3.0	UG	5.20		5.44	*****	0.0238		0.95		0.14
OCT 12,88	OCT 11,88	171.0	10.0	UG	5.89	UG	6.78	*****	0.0492	LG	0.65	<T	0.02
OCT 13,88	OCT 12,88	32.0	2.5		*****		5.53	*****	0.0241	LG	0.30	<T	0.02
OCT 16,88	OCT 15,88	16.0	29.0		*****		4.21	*****	0.0861		3.55		0.60
OCT 17,88	OCT 16,88	92.0	20.5		*****		4.61	*****	0.0514		3.35		0.63
OCT 18,88	OCT 17,88	910.0	20.0		4.17		4.29	*****	0.0855		2.50		0.38
OCT 19,88	OCT 18,88	57.0	2.0		*****	UG	7.49	*****	0.0215	LG	0.50	LG	0.05
OCT 20,88	OCT 19,88	36.0	10.5		*****	UG	7.45	*****	0.0261		1.90		0.20
OCT 22,88	OCT 21,88	263.0	31.0		3.72		4.17	*****	0.0973		2.45		0.71
OCT 24,88	OCT 22,88	446.0	31.0		*****		4.18	*****	0.0925		2.30		0.79
OCT 25,88	OCT 24,88	1029.0	11.0		4.10		4.65	*****	0.0482		1.40	<T	0.01
OCT 26,88	OCT 25,88	260.0	6.0		4.10		5.10	*****	0.0306		1.05	LG	0.13
OCT 27,88	OCT 26,88	470.0	4.0	B	5.43	B	7.50	*****	0.0183	LG	0.50	LG	0.08
OCT 28,88	OCT 27,88	455.0	36.0		3.47		4.17	*****	0.0968		2.40		0.83
NOV 1,88	OCT 31,88	55.0	34.0		*****		4.33	*****	0.0749		3.05		1.07
NOV 2,88	NOV 1,88	13.0	20.5		*****		4.56	*****	0.0781		1.80		0.81
NOV 4,88	NOV 3,88	111.0	55.5	D	3.86		3.94	*****	0.1600		4.85		1.02
NOV 5,88	NOV 4,88	272.0	42.0		4.03		4.15	*****	0.1070		3.55		0.77
NOV 6,88	NOV 5,88	1069.0	12.5	D	4.44		4.45	*****	0.0621		1.50		0.18
NOV 7,88	NOV 6,88	182.0	9.0		4.63		4.91	*****	0.0331		1.00	<T	0.03
NOV 8,88	NOV 7,88	176.0	20.0		4.37		4.42	*****	0.0674		1.85		0.54
NOV 9,88	NOV 8,88	447.0	17.0		*****		4.37	*****	0.0601		1.60		0.26
NOV 10,88	NOV 9,88	965.0	29.0		*****		4.19	*****	0.0835		3.00		0.42
NOV 11,88	NOV 10,88	203.0	20.0		*****		4.38	*****	0.0634		2.45		0.37
NOV 13,88	NOV 12,88	996.0	18.5		4.27		4.33	*****	0.0647		1.70		0.36
NOV 14,88	NOV 13,88	32.0	!IS *****	*****	*****		4.57	*****	0.0504		1.90		0.56
NOV 17,88	NOV 16,88	361.0	23.0		4.38		4.03	*****	0.1320		4.65		0.49
NOV 21,88	NOV 20,88	1255.0	14.0		4.45		4.50	*****	0.0579		1.85		0.16
NOV 22,88	NOV 21,88	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
NOV 27,88	NOV 26,88	225.0	64.5		3.72		3.91	*****	0.1610		6.70		1.08
NOV 29,88	NOV 28,88	59.0	10.0		*****		5.27	*****	0.0236		1.45		0.43
DEC 1,88	NOV 30,88	101.0	!IR *****		4.39		4.71	*****	0.0560		2.40		1.36
DEC 2,88	DEC 1,88	21.0	!IS *****	*****	*****		5.70	*****	0.0195	!IS *****	*****	!IS *****	*****
DEC 4,88	DEC 3,88	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
DEC 8,88	DEC 7,88	16.0	!IS *****	*****	*****	UG	6.89	*****	0.0156	!IS *****	*****	!IS *****	*****
DEC 9,88	DEC 8,88	37.0	!IS *****	*****	*****	UG	7.37	*****	0.0122	!IS *****	*****	!IS *****	*****
DEC 10,88	DEC 9,88	46.0	!IS *****	*****	*****	UG	7.13	*****	0.0137	!IS *****	*****	!IS *****	*****
DEC 11,88	DEC 10,88	17.0	!IS *****	*****	*****	UG	7.09	*****	0.0127	!IS *****	*****	!IS *****	*****

ONTARIO MINISTRY OF THE ENVIRONMENT
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REMOVAL DATE	EXPOSURE DATE	CALCIUM MG/L	CHLORIDE MG/L	MAGNESIM MG/L	POTASSIM MG/L	SODIUM MG/L	AMMONIUM AS N MG/L	FREE H+ LAB MG/L
OCT 7,88	OCT 6,88	0.30	0.12	D 0.065	<T 0.020	0.025	0.460	D 0.0347
OCT 9,88	OCT 8,88	1.44	0.34	0.270	0.085	0.030	1.950	UG 0.0000
OCT 11,88	OCT 10,88	0.10	<W 0.01	<T 0.015	0.025	<T 0.005	0.286	0.0036
OCT 12,88	OCT 11,88	D 0.66	<W 0.01	D 0.450	U 1.720	0.025	0.186	UG 0.0002
OCT 13,88	OCT 12,88	0.18	0.08	0.050	<T 0.015	0.085	0.200	0.0030
OCT 16,88	OCT 15,88	0.62	0.37	0.075	D 0.035	0.150	0.376	0.0617
OCT 17,88	OCT 16,88	0.94	0.17	0.180	0.080	0.075	0.520	0.0245
OCT 18,88	OCT 17,88	0.24	0.06	D 0.165	D 0.175	0.035	0.306	0.0513
OCT 19,88	OCT 18,88	<T 0.06	<T 0.03	<T 0.010	<T 0.020	0.045	0.320	UG 0.0000
OCT 20,88	OCT 19,88	!IS *****	0.13	!IS *****	!IS *****	!IS *****	1.140	UG 0.0000
OCT 22,88	OCT 21,88	0.22	0.16	<T 0.020	<T 0.020	<T 0.020	0.450	0.0676
OCT 24,88	OCT 22,88	0.12	<T 0.05	<T 0.015	0.025	<T 0.020	0.396	0.0661
OCT 25,88	OCT 24,88	<T 0.06	<T 0.03	<T 0.005	<T 0.015	<T 0.005	0.266	0.0224
OCT 26,88	OCT 25,88	<T 0.04	<W 0.01	<T 0.015	<T 0.025	0.030	0.286	0.0079
OCT 27,88	OCT 26,88	<T 0.02	0.07	<T 0.005	<T 0.010	UG 0.750	B 0.140	B 0.0000
OCT 28,88	OCT 27,88	0.22	0.12	0.025	0.025	<T 0.025	0.396	0.0676
NOV 1,88	OCT 31,88	0.90	0.14	0.155	0.045	0.045	0.436	0.0468
NOV 2,88	NOV 1,88	0.46	0.15	0.080	0.025	0.040	0.450	0.0275
NOV 4,88	NOV 3,88	0.22	0.17	0.030	0.030	0.055	0.630	0.1148
NOV 5,88	NOV 4,88	0.14	0.34	0.030	0.040	0.160	0.440	0.0708
NOV 6,88	NOV 5,88	<T 0.04	0.19	<T 0.020	<T 0.010	0.100	0.220	0.0355
NOV 7,88	NOV 6,88	<T 0.02	<T 0.04	<W 0.005	<W 0.005	<T 0.005	0.296	0.0123
NOV 8,88	NOV 7,88	0.26	0.11	0.025	<T 0.020	<T 0.020	0.336	0.0380
NOV 9,88	NOV 8,88	<T 0.06	<T 0.04	<W 0.005	<T 0.005	<T 0.010	0.196	0.0427
NOV 10,88	NOV 9,88	0.18	0.33	0.035	<T 0.020	0.185	0.240	0.0646
NOV 11,88	NOV 10,88	0.12	0.08	<T 0.025	0.025	0.040	0.396	0.0417
NOV 13,88	NOV 12,88	<T 0.08	0.07	<T 0.010	<T 0.010	<T 0.020	0.176	0.0468
NOV 14,88	NOV 13,88	!IS *****	0.46	!IS *****	!IS *****	!IS *****	0.390	0.0269
NOV 17,88	NOV 16,88	1.02	0.31	0.120	0.050	0.135	0.646	0.0933
NOV 21,88	NOV 20,88	<T 0.08	0.07	<T 0.015	<T 0.005	<T 0.005	0.156	0.0316
NOV 22,88	NOV 21,88	*****	*****	*****	*****	*****	*****	*****
NOV 27,88	NOV 26,88	<T 0.04	1.41	0.120	0.080	0.680	0.840	0.1230
NOV 29,88	NOV 28,88	0.28	<W 0.01	0.045	0.030	0.040	0.630	0.0054
DEC 1,88	NOV 30,88	1.16	<W 0.01	0.110	0.055	0.060	0.730	0.0195
DEC 2,88	DEC 1,88	0.42	!IS *****	0.070	0.040	0.100	0.420	0.0020
DEC 4,88	DEC 3,88	*****	*****	*****	*****	*****	*****	*****
DEC 8,88	DEC 7,88	0.70	!IS *****	0.150	0.035	0.050	0.166	UG 0.0001
DEC 9,88	DEC 8,88	2.68	!IS *****	UG 0.810	0.050	0.185	0.300	UG 0.0000
DEC 10,88	DEC 9,88	0.98	!IS *****	0.270	0.065	0.150	0.226	UG 0.0001
DEC 11,88	DEC 10,88	0.88	!IS *****	0.265	<T 0.020	0.040	0.090	UG 0.0001

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REMOVAL DATE	EXPOSURE DATE	SAMPLING START/END HR. HR.	PRECIP START/END HR. HR.	SAMPLE TYPE 01-RAIN 02-SNOW 03-COMP/04-OTHER	GAUGE DEPTH(MM)	GAUGE TYPE 01-STD. 02-NIPHER	SAMPLE NUMBER	PROJECT CODE 02-APIOS 03-SPECIAL	SUBPROJECT CODE 01-MOE 03-AES	SAMPLER EFFICI- ENCY (%)	COMMENTS FIELD OFFICE
DEC 13,88	DEC 12,88	800 720	1000 1400	2	2.0	2	10	2	1	13	
DEC 14,88	DEC 13,88	730 720	730 100	2	****	2	11	2	1	****	Q
DEC 15,88	DEC 14,88	730 730	900 1500	3	2.3	2	12	2	1	78	
DEC 16,88	DEC 15,88	730 730	800 1400	2	0.7	2	13	2	1	55	
DEC 17,88	DEC 16,88	730 900	900 1300	2	0.2	2	14	2	1	****	E N
DEC 18,88	DEC 17,88	900 1000	1800 1000	2	2.7	2	15	2	1	63	JHM
DEC 19,88	DEC 18,88	1000 730	1000 100	2	2.1	2	16	2	1	22	
DEC 20,88	DEC 19,88	730 730	100 400	1	0.5	2	17	2	1	187	N
DEC 21,88	DEC 20,88	730 725	900 2400	1	1.7	2	18	2	1	****	E N
DEC 23,88	DEC 22,88	800 720	100 720	3	12.3	2	19	2	1	92	JC
DEC 25,88	DEC 24,88	800 1000	1200 1000	2	3.3	2	20	2	1	79	JH
DEC 26,88	DEC 25,88	1000 850	900 1800	2	1.4	2	21	2	1	47	N
DEC 27,88	DEC 26,88	850 815	2400 815	3	7.6	2	22	2	1	81	J
DEC 28,88	DEC 27,88	900 715	800 100	3	26.2	2	28	2	1	102	Q NC
DEC 29,88	DEC 28,88	715 715	1700 100	1	1.5	2	31	2	1	30	N
DEC 30,88	DEC 29,88	715 715	1000 100	2	0.7	2	32	2	1	42	

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REMOVAL DATE	EXPOSURE DATE	VOLUME ML	CONDUCT. UMHO/CM	PH FIELD	PH LAB	TOTAL H+ TO PH8.3 MG/L	TOTAL H+ GRAN MG/L	SULPHATE MG/L	NITRATE AS N MG/L
DEC 13,88	DEC 12,88	17.0	!IS *****	*****	5.88	*****	0.0200	!IS *****	!IS *****
DEC 14,88	DEC 13,88	30.0	!IS *****	*****	4.28	*****	0.0777	!IS *****	!IS *****
DEC 15,88	DEC 14,88	115.0	!IS *****	4.14	4.39	*****	0.0758	!IS *****	!IS *****
DEC 16,88	DEC 15,88	25.0	!IS *****	*****	UG 7.30	*****	0.0136	!IS *****	!IS *****
DEC 17,88	DEC 16,88	*****	*****	*****	*****	*****	*****	*****	*****
DEC 18,88	DEC 17,88	110.0	!IS *****	4.34	5.97	*****	0.0159	D 5.20	1.60
DEC 19,88	DEC 18,88	30.0	!IS *****	*****	4.91	*****	0.0306	LG 0.40	0.49
DEC 20,88	DEC 19,88	60.0	!IS *****	*****	3.87	*****	0.1800	UG 8.75	1.11
DEC 21,88	DEC 20,88	*****	*****	*****	*****	*****	*****	*****	*****
DEC 23,88	DEC 22,88	729.0	11.0	3.72	4.39	*****	0.0603	2.20	0.38
DEC 25,88	DEC 24,88	169.0	9.0	4.25	4.97	*****	0.0286	1.05	0.31
DEC 26,88	DEC 25,88	43.0	!IS *****	*****	5.83	*****	0.0231	!IS *****	!IS *****
DEC 27,88	DEC 26,88	398.0	16.0	3.82	4.50	*****	0.0500	1.50	0.24
DEC 28,88	DEC 27,88	1718.0	16.0	*****	4.33	*****	0.0719	2.05	0.27
DEC 29,88	DEC 28,88	29.0	!IS *****	*****	UG 6.86	*****	0.0166	!IS *****	!IS *****
DEC 30,88	DEC 29,88	19.0	!IS *****	*****	UG 6.82	*****	0.0166	!IS *****	!IS *****

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REMOVAL DATE	EXPOSURE DATE	CALCIUM MG/L	CHLORIDE MG/L	MAGNESIUM MG/L	POTASSIUM MG/L	SODIUM MG/L	AMMONIUM AS N MG/L	FREE H+ LAB MG/L
DEC 13,88	DEC 12,88	0.66	!IS *****	0.145	0.055	0.425	LG 0.026	0.0013
DEC 14,88	DEC 13,88	0.52	!IS *****	0.090	0.035	0.270	0.390	0.0525
DEC 15,88	DEC 14,88	2.14	!IS *****	0.250	0.110	0.265	0.566	0.0407
DEC 16,88	DEC 15,88	!IS *****	!IS *****	!IS *****	!IS *****	!IS *****	0.206	UG 0.0001
DEC 17,88	DEC 16,88	*****	*****	*****	*****	*****	*****	*****
DEC 18,88	DEC 17,88	0.14	0.75	0.030	<T 0.005	<T 0.010	0.146	0.0011
DEC 19,88	DEC 18,88	0.38	0.21	0.035	<T 0.005	0.060	0.110	0.0123
DEC 20,88	DEC 19,88	1.24	0.60	0.135	0.035	0.190	0.496	0.1349
DEC 21,88	DEC 20,88	*****	*****	*****	*****	*****	*****	*****
DEC 23,88	DEC 22,88	0.24	<W 0.01	0.055	0.030	0.060	0.250	0.0407
DEC 25,88	DEC 24,88	0.30	<W 0.01	0.035	<T 0.020	0.035	0.276	0.0107
DEC 26,88	DEC 25,88	0.46	!IS *****	0.130	0.050	0.065	0.846	0.0015
DEC 27,88	DEC 26,88	0.18	0.29	0.035	<T 0.020	0.115	0.176	0.0316
DEC 28,88	DEC 27,88	<T 0.04	0.17	<T 0.005	<T 0.010	0.040	0.146	0.0468
DEC 29,88	DEC 28,88	1.14	!IS *****	0.270	<T 0.020	0.105	0.160	UG 0.0001
DEC 30,88	DEC 29,88	1.70	!IS *****	0.230	<T 0.010	0.110	<W 0.006	UG 0.0002

ONTARIO MINISTRY OF THE ENVIRONMENT
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REMOVAL DATE	EXPOSURE DATE	SAMPLING START/END HR. HR.	PRECIP START/END HR. HR.	SAMPLE TYPE 01-RAIN 02-SNOW 03-COMP/04-OTHER	GAUGE DEPTH(MM)	GAUGE TYPE 01-STD. 02-NIPHER	SAMPLE NUMBER	PROJECT CODE 02-APIOS 03-SPECIAL	SUBPROJECT CODE 01-MOE 03-AES	SAMPLER EFFICI- ENCY (%)	COMMENTS FIELD OFFICE
JAN 2,88	JAN 1,88	500 500	900 1100	2	1.7	2	62830	2	1	3	XN
JAN 5,88	JAN 4,88	300 500	300 1000	2	5.8	2	62832	2	1	9	C N
JAN 7,88	JAN 6,88	500 500	900 1400	2	5.4	2	62834	2	1	11	N
JAN 9,88	JAN 8,88	500 500	**** 300	2	0.5	2	62836	2	1	180	E N
JAN 13,88	JAN 12,88	500 500	**** 400	2	0.8	2	62838	2	1	115	
JAN 14,88	JAN 13,88	500 500	**** ****	2	0.8	2	62840	2	1	5	E N
JAN 17,88	JAN 16,88	500 1100	**** 1100	1	2.9	2	62842	2	1	105	
JAN 18,88	JAN 17,88	1100 500	1100 ****	1	10.5	2	62843	2	1	96	
JAN 19,88	JAN 18,88	500 500	500 700	1	0.4	2	62846	2	1	124	N
JAN 20,88	JAN 19,88	500 500	**** 500	1	4.6	2	62848	2	1	69	J
JAN 21,88	JAN 20,88	500 500	**** 100	2	0.2	2	62850	2	1	****	E N
JAN 22,88	JAN 21,88	500 500	700 1000	2	1.7	2	62852	2	1	26	N
JAN 23,88	JAN 22,88	500 500	**** ****	2	0.2	2	62854	2	1	****	E N
JAN 24,88	JAN 23,88	500 1100	2300 1000	2	2.9	2	62856	2	1	11	N
JAN 27,88	JAN 26,88	500 500	2100 100	2	1.7	2	62858	2	1	****	E N
JAN 29,88	JAN 28,88	500 500	**** ****	2	0.8	2	62860	2	1	****	E N
FEB 1,88	JAN 31,88	500 500	1130 2300	1	10.5	2	62862	2	1	109	
FEB 2,88	FEB 1,88	500 500	1330 1700	3	12.5	2	62864	2	1	44	NC
FEB 4,88	FEB 3,88	500 500	2200 300	2	4.7	2	62866	2	1	47	N
FEB 6,88	FEB 5,88	500 500	**** ****	2	3.1	2	62868	2	1	****	E N
FEB 7,88	FEB 6,88	500 500	**** ****	3	2.2	2	62870	2	1	****	E N
FEB 8,88	FEB 7,88	500 500	1300 1700	2	4.6	2	62872	2	1	4	N
FEB 10,88	FEB 9,88	500 500	400 1000	2	2.9	2	62874	2	1	51	
FEB 12,88	FEB 11,88	500 500	1300 500	2	12.7	2	62876	2	1	13	N
FEB 13,88	FEB 12,88	500 500	500 800	2	4.9	2	62878	2	1	13	N
FEB 14,88	FEB 13,88	500 500	**** ****	2	0.1	2	62880	2	1	****	E N
FEB 15,88	FEB 14,88	500 500	**** 500	3	4.4	2	62882	2	1	82	C
FEB 17,88	FEB 16,88	500 500	**** ****	2	2.2	2	62884	2	1	73	
FEB 20,88	FEB 19,88	500 500	1400 2200	3	14.1	2	62886	2	1	91	
FEB 21,88	FEB 20,88	800 500	800 900	2	7.2	2	62888	2	1	12	NC
FEB 23,88	FEB 22,88	500 500	1800 2000	1	0.4	2	62890	2	1	81	
FEB 24,88	FEB 23,88	500 500	1600 1730	2	1.1	2	62892	2	1	18	C NHM
FEB 25,88	FEB 24,88	500 500	1600 2000	2	2.7	2	62894	2	1	39	N
FEB 27,88	FEB 26,88	500 500	1600 2000	2	1.3	2	62896	2	1	****	E N
FEB 29,88	FEB 28,88	500 500	2200 300	2	0.8	2	62898	2	1	37	NH
MAR 2,88	MAR 1,88	500 500	**** ****	2	0.4	2	62900	2	1	****	E N
MAR 10,88	MAR 9,88	500 800	1700 2000	3	1.7	2	62902	2	1	116	
MAR 13,88	MAR 12,88	800 1100	900 1600	3	6.8	2	62904	2	1	89	
MAR 14,88	MAR 13,88	1100 500	2200 400	2	1.6	2	62906	2	1	46	N
MAR 15,88	MAR 14,88	500 500	**** 400	2	1.4	2	62908	2	1	54	

ONTARIO MINISTRY OF THE ENVIRONMENT
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REMOVAL DATE	EXPOSURE DATE	VOLUME ML	CONDUCT. UMHO/CM	PH FIELD	PH LAB	TOTAL H+ TO PH8.3 MG/L	TOTAL H+ GRAN MG/L	SULPHATE MG/L	NITRATE AS N MG/L
JAN 2,88	JAN 1,88	4.0	*****	*****	*****	*****	*****	*****	*****
JAN 5,88	JAN 4,88	37.0	!IS *****	*****	UG 7.64	*****	0.0128	1.25	0.73
JAN 7,88	JAN 6,88	39.0	*****	*****	!IS *****	*****	!IS *****	LG 0.50	LG 0.10
JAN 9,88	JAN 8,88	58.0	*****	*****	*****	*****	*****	*****	*****
JAN 13,88	JAN 12,88	59.0	*****	*****	4.11	*****	0.1250	7.70	2.14
JAN 14,88	JAN 13,88	3.0	*****	*****	*****	*****	*****	*****	*****
JAN 17,88	JAN 16,88	196.0	*****	*****	4.33	*****	0.0710	2.00	0.56
JAN 18,88	JAN 17,88	647.0	*****	*****	4.08	*****	0.0953	1.90	0.60
JAN 19,88	JAN 18,88	32.0	!IS *****	*****	4.11	*****	0.1520	!IS *****	!IS *****
JAN 20,88	JAN 19,88	205.0	*****	*****	3.77	*****	0.1100	2.90	0.80
JAN 21,88	JAN 20,88	*****	*****	*****	*****	*****	*****	*****	*****
JAN 22,88	JAN 21,88	29.0	!IS *****	*****	4.86	*****	0.0436	1.79	0.54
JAN 23,88	JAN 22,88	*****	*****	*****	*****	*****	*****	*****	*****
JAN 24,88	JAN 23,88	21.0	!IS *****	*****	D 6.41	*****	0.0198	!IS *****	!IS *****
JAN 27,88	JAN 26,88	*****	*****	*****	*****	*****	*****	*****	*****
JAN 29,88	JAN 28,88	*****	*****	*****	*****	*****	*****	*****	*****
FEB 1,88	JAN 31,88	740.0	*****	*****	4.39	*****	0.0603	2.50	0.26
FEB 2,88	FEB 1,88	359.0	*****	*****	4.80	*****	0.0347	1.70	0.18
FEB 4,88	FEB 3,88	143.0	*****	*****	4.69	*****	0.0333	LG 0.40	0.30
FEB 6,88	FEB 5,88	*****	*****	*****	*****	*****	*****	*****	*****
FEB 7,88	FEB 6,88	*****	*****	*****	*****	*****	*****	*****	*****
FEB 8,88	FEB 7,88	14.0	*****	*****	5.35	*****	0.0234	LG 0.45	0.31
FEB 10,88	FEB 9,88	95.0	*****	*****	4.15	*****	0.0920	0.55	1.19
FEB 12,88	FEB 11,88	110.0	*****	*****	4.05	*****	0.1160	1.85	1.17
FEB 13,88	FEB 12,88	41.0	*****	*****	4.19	*****	0.0923	3.05	0.80
FEB 14,88	FEB 13,88	*****	*****	*****	*****	*****	*****	*****	*****
FEB 15,88	FEB 14,88	232.0	*****	*****	4.07	*****	0.1080	3.35	0.77
FEB 17,88	FEB 16,88	104.0	*****	*****	4.10	*****	0.1010	3.10	0.80
FEB 20,88	FEB 19,88	826.0	*****	*****	4.36	*****	0.0668	1.40	0.52
FEB 21,88	FEB 20,88	57.0	*****	*****	4.81	*****	0.0418	1.45	0.43
FEB 23,88	FEB 22,88	21.0	*****	*****	UG 7.11	*****	0.0201	3.00	1.09
FEB 24,88	FEB 23,88	13.0	LG 5.0	*****	UG 6.94	*****	0.0159	0.65	0.26
FEB 25,88	FEB 24,88	69.0	*****	*****	6.46	*****	0.0170	0.75	0.51
FEB 27,88	FEB 26,88	*****	!RE *****	*****	!RE *****	*****	!RE *****	!RE *****	!RE *****
FEB 29,88	FEB 28,88	19.0	*****	*****	UG 6.89	*****	0.0176	2.25	0.57
MAR 2,88	MAR 1,88	*****	*****	*****	*****	*****	*****	*****	*****
MAR 10,88	MAR 9,88	127.0	*****	*****	4.38	*****	0.0567	2.75	0.61
MAR 13,88	MAR 12,88	391.0	*****	*****	4.39	*****	0.0623	3.10	0.61
MAR 14,88	MAR 13,88	48.0	*****	*****	4.46	*****	0.0568	2.30	0.51
MAR 15,88	MAR 14,88	49.0	!IS *****	*****	6.33	*****	0.0175	!IS *****	!IS *****

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REMOVAL DATE	EXPOSURE DATE	CALCIUM MG/L	CHLORIDE MG/L	MAGNESIM MG/L	POTASSIM MG/L	SODIUM MG/L	AMMONIUM AS N MG/L	FREE H+ LAB MG/L
JAN 2,88	JAN 1,88	*****	*****	*****	*****	*****	*****	*****
JAN 5,88	JAN 4,88	!IS *****	1.00	!IS *****	!IS *****	!IS *****	0.165	UG 0.0000
JAN 7,88	JAN 6,88	!IS *****	0.34	!IS *****	!IS *****	!IS *****	0.165	!IS *****
JAN 9,88	JAN 8,88	*****	*****	*****	*****	*****	*****	*****
JAN 13,88	JAN 12,88	1.78	0.75	0.355	0.065	0.270	1.840	0.0776
JAN 14,88	JAN 13,88	*****	*****	*****	*****	*****	*****	*****
JAN 17,88	JAN 16,88	0.26	0.20	0.045	<T 0.015	0.080	0.310	0.0468
JAN 18,88	JAN 17,88	<T 0.04	0.17	<T 0.010	<T 0.015	0.045	0.200	0.0708
JAN 19,88	JAN 18,88	!IS *****	!IS *****	!IS *****	!IS *****	!IS *****	1.210	0.0776
JAN 20,88	JAN 19,88	0.26	0.19	0.030	<T 0.015	0.045	0.300	0.0617
JAN 21,88	JAN 20,88	*****	*****	*****	*****	*****	*****	*****
JAN 22,88	JAN 21,88	!IS *****	0.18	!IS *****	!IS *****	!IS *****	0.340	0.0138
JAN 23,88	JAN 22,88	*****	*****	*****	*****	*****	*****	*****
JAN 24,88	JAN 23,88	!IS *****	!IS *****	!IS *****	!IS *****	!IS *****	0.250	D 0.0004
JAN 27,88	JAN 26,88	*****	*****	*****	*****	*****	*****	*****
JAN 29,88	JAN 28,88	*****	*****	*****	*****	*****	*****	*****
FEB 1,88	JAN 31,88	0.14	0.55	0.045	<T 0.015	0.315	0.330	0.0331
FEB 2,88	FEB 1,88	<T 0.04	<T 0.03	<T 0.010	<W 0.005	0.030	0.420	0.0091
FEB 4,88	FEB 3,88	<T 0.06	0.13	<T 0.015	<W 0.005	0.030	0.120	0.0155
FEB 6,88	FEB 5,88	*****	*****	*****	*****	*****	*****	*****
FEB 7,88	FEB 6,88	*****	*****	*****	*****	*****	*****	*****
FEB 8,88	FEB 7,88	!IS *****	0.19	!IS *****	!IS *****	!IS *****	0.200	0.0045
FEB 10,88	FEB 9,88	0.20	0.44	0.040	<T 0.005	0.125	0.160	0.0631
FEB 12,88	FEB 11,88	<T 0.10	0.33	<T 0.025	<T 0.010	0.095	0.330	0.0794
FEB 13,88	FEB 12,88	!IS *****	0.99	!IS *****	!IS *****	!IS *****	0.450	0.0646
FEB 14,88	FEB 13,88	*****	*****	*****	*****	*****	*****	*****
FEB 15,88	FEB 14,88	0.28	0.29	0.035	<T 0.020	0.175	0.390	0.0794
FEB 17,88	FEB 16,88	0.14	0.17	0.025	<T 0.020	0.100	0.550	0.0692
FEB 20,88	FEB 19,88	<T 0.06	0.10	<T 0.010	<T 0.005	0.045	0.280	0.0417
FEB 21,88	FEB 20,88	0.12	0.17	0.030	<T 0.015	0.075	0.420	0.0155
FEB 23,88	FEB 22,88	!IS *****	0.55	!IS *****	!IS *****	!IS *****	1.060	UG 0.0001
FEB 24,88	FEB 23,88	0.50	0.27	0.105	<W 0.005	0.110	0.200	UG 0.0001
FEB 25,88	FEB 24,88	0.78	0.39	0.150	<T 0.005	0.140	0.300	0.0003
FEB 27,88	FEB 26,88	!RE *****	!RE *****	!RE *****	!RE *****	!RE *****	!RE *****	!RE *****
FEB 29,88	FEB 28,88	0.86	0.22	0.210	<T 0.015	0.210	0.550	UG 0.0001
MAR 2,88	MAR 1,88	*****	*****	*****	*****	*****	*****	*****
MAR 10,88	MAR 9,88	0.32	0.15	0.055	<T 0.015	0.090	0.670	0.0316
MAR 13,88	MAR 12,88	0.56	0.24	0.100	<T 0.020	0.095	0.550	0.0331
MAR 14,88	MAR 13,88	0.20	0.11	0.050	<W 0.005	0.055	0.540	0.0347
MAR 15,88	MAR 14,88	0.24	!IS *****	0.055	<T 0.020	0.130	0.250	0.0005

ONTARIO MINISTRY OF THE ENVIRONMENT
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REMOVAL DATE	EXPOSURE DATE	SAMPLING START/END HR. HR.	PRECIP START/END HR. HR.	SAMPLE TYPE 01-RAIN 02-SNOW 03-COMP/04-OTHER	GAUGE DEPTH(MM)	GAUGE TYPE 01-STD. 02-NIPHER	SAMPLE NUMBER	PROJECT CODE 02-APIOS 03-SPECIAL	SUBPROJECT CODE 01-MOE 03-AES	SAMPLER EFFICI- ENCY (%)	COMMENTS FIELD OFFICE
MAR 19,88	MAR 18,88	500 500	2000 500	2	1.7	2	62910	2	1	49	NH
MAR 20,88	MAR 19,88	500 500	1900 ****	2	3.4	2	62912	2	1	58	J
MAR 24,88	MAR 23,88	500 500	2300 200	1	3.5	2	62914	2	1	98	CD J
MAR 25,88	MAR 24,88	500 500	2200 100	1	0.3	2	62916	2	1	114	
MAR 26,88	MAR 25,88	500 500	1200 1600	1	9.1	2	62918	2	1	108	CD H
MAR 27,88	MAR 26,88	500 1100	**** ****	3	2.2	2	62920	2	1	96	C J
MAR 29,88	MAR 28,88	500 500	**** 200	1	0.6	2	62922	2	1	156	N
APR 1,88	MAR 30,88	500 1500	**** ****	1	0.1	1	62924	2	1	****	E NY2
APR 2,88	APR 1,88	1500 1430	1200 1430	1	0.7	1	62926	2	1	75	
APR 3,88	APR 2,88	1430 1100	1430 1000	1	28.0	1	62928	2	1	85	
APR 4,88	APR 3,88	1100 930	2200 700	1	5.2	1	62930	2	1	128	N
APR 5,88	APR 4,88	930 900	700 800	1	0.1	1	62932	2	1	****	E N
APR 8,88	APR 7,88	500 500	1900 ****	1	0.7	1	62934	2	1	127	N
APR 14,88	APR 13,88	930 930	400 930	1	3.7	1	62936	2	1	99	BAC JH
APR 15,88	APR 14,88	930 930	**** ****	2	7.1	1	62938	2	1	117	H
APR 18,88	APR 17,88	900 900	**** 400	3	6.4	1	62940	2	1	121	ABC NJ
APR 20,88	APR 19,88	900 900	**** 400	1	0.3	1	62942	2	1	124	Q N
APR 23,88	APR 22,88	600 600	300 600	1	5.8	1	62944	2	1	239	NJHM
APR 28,88	APR 27,88	600 600	1300 1500	1	6.0	1	62950	2	1	96	B J
APR 29,88	APR 28,88	600 500	2200 200	1	0.7	1	62952	2	1	49	N
APR 30,88	APR 29,88	500 530	**** ****	1	5.6	1	62955	2	1	93	X
MAY 10,88	MAY 9,88	600 600	1800 2100	1	13.8	1	62956	2	1	92	A J
MAY 11,88	MAY 10,88	600 600	1000 1400	1	1.3	1	62958	2	1	88	
MAY 16,88	MAY 15,88	530 530	700 1230	1	21.1	1	62960	2	1	104	NJH
MAY 17,88	MAY 16,88	530 530	1330 1500	1	5.1	1	62962	2	1	88	C J
MAY 19,88	MAY 18,88	530 530	**** ****	1	2.5	1	62964	2	1	84	HCM
MAY 20,88	MAY 19,88	530 530	**** ****	1	1.7	1	62966	2	1	39	N
MAY 21,88	MAY 20,88	530 530	**** 400	1	0.8	1	62968	2	1	113	
MAY 22,88	MAY 21,88	530 530	1030 1900	1	12.8	1	62970	2	1	112	
MAY 27,88	MAY 26,88	530 530	430 500	1	0.4	1	62972	2	1	136	N
JUN 4,88	JUN 3,88	530 530	1200 1430	1	1.1	1	62974	2	1	63	
JUN 9,88	JUN 8,88	530 530	1300 1500	1	0.9	1	62976	2	1	74	
JUN 16,88	JUN 15,88	530 530	1900 300	1	4.4	1	62978	2	1	103	A J
JUN 23,88	JUN 22,88	530 530	1645 1650	1	0.3	1	62982	2	1	57	E
JUN 29,88	JUN 28,88	530 530	1800 1810	1	0.4	1	62984	2	1	97	A
JUL 11,88	JUL 10,88	530 530	2230 ****	1	1.2	1	62986	2	1	75	T
JUL 12,88	JUL 11,88	530 530	730 900	1	10.7	1	62988	2	1	124	NJ
JUL 16,88	JUL 15,88	600 600	200 530	1	18.3	1	62992	2	1	101	
JUL 17,88	JUL 16,88	600 1200	400 730	1	26.5	1	62993	2	1	103	J
JUL 21,88	JUL 20,88	530 530	400 500	1	0.3	1	62995	2	1	****	E N

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REMOVAL DATE	EXPOSURE DATE	VOLUME ML	CONDUCT. UMHO/CM		PH FIELD	PH LAB	TOTAL H+ TO PH8.3 MG/L	TOTAL H+ GRAN MG/L	SULPHATE MG/L	NITRATE AS N MG/L
MAR 19,88	MAR 18,88	54.0	25.0		*****	5.63	*****	0.0235	2.55	1.04
MAR 20,88	MAR 19,88	128.0	10.5		4.59	6.10	*****	0.0174	0.75	0.49
MAR 24,88	MAR 23,88	222.0	47.5	UG	5.30	6.98	*****	0.0240	7.25	1.82
MAR 25,88	MAR 24,88	22.0	27.0		*****	4.43	*****	0.0640	3.55	0.44
MAR 26,88	MAR 25,88	634.0	16.0		4.69	4.97	*****	0.0315	2.30	0.39
MAR 27,88	MAR 26,88	136.0	21.0	UG	5.59	6.56	*****	0.0254	3.65	0.67
MAR 29,88	MAR 28,88	60.0	48.5		*****	4.28	*****	0.0889	UG 8.60	0.70
APR 1,88	MAR 30,88	*****	*****		*****	*****	*****	*****	*****	*****
APR 2,88	APR 1,88	34.0	67.0		*****	3.88	*****	0.1750	7.95	1.05
APR 3,88	APR 2,88	1530.0	24.5		4.08	4.37	*****	0.0652	2.40	0.27
APR 4,88	APR 3,88	427.0	17.5		4.22	4.53	*****	0.0503	1.70	0.22
APR 5,88	APR 4,88	*****	*****		*****	*****	*****	*****	*****	*****
APR 8,88	APR 7,88	57.0	76.0		*****	3.91	*****	D 0.1660	7.15	2.40
APR 14,88	APR 13,88	237.0	70.5	UG	6.00	UG 7.07	*****	0.0298	UG 9.25	UG 3.20
APR 15,88	APR 14,88	536.0	11.5		4.73	5.11	*****	0.0349	2.00	0.42
APR 18,88	APR 17,88	497.0	28.5	UG	6.62	UG 7.35	*****	0.0223	3.40	0.76
APR 20,88	APR 19,88	24.0	11.0		*****	UG 7.13	*****	0.0200	1.50	LG 0.10
APR 23,88	APR 22,88	889.0	13.5		3.55	UG 7.06	*****	0.0205	1.65	0.39
APR 28,88	APR 27,88	370.0	40.5		3.76	4.61	*****	0.0641	6.40	1.11
APR 29,88	APR 28,88	22.0	19.5		*****	4.87	*****	0.0404	2.50	0.77
APR 30,88	APR 29,88	336.0	*****		*****	*****	*****	*****	*****	*****
MAY 10,88	MAY 9,88	818.0	22.5	B	5.65	UG 7.11	*****	0.0225	3.80	0.52
MAY 11,88	MAY 10,88	74.0	54.5		*****	UG 7.14	*****	0.0231	9.00	1.72
MAY 16,88	MAY 15,88	1420.0	27.0	D	4.09	D 5.38	*****	D 0.0313	5.65	0.81
MAY 17,88	MAY 16,88	289.0	18.5	UG	6.04	UG 7.19	*****	0.0177	1.90	0.69
MAY 19,88	MAY 18,88	135.0	12.5		*****	UG 7.53	*****	0.0092	0.80	0.30
MAY 20,88	MAY 19,88	43.0	22.0		*****	4.64	*****	0.0490	4.95	0.39
MAY 21,88	MAY 20,88	58.0	34.0		*****	!IS *****	*****	!IS *****	4.50	1.40
MAY 22,88	MAY 21,88	920.0	12.5		*****	5.00	*****	0.0290	2.00	0.27
MAY 27,88	MAY 26,88	35.0	42.0		*****	UG 7.25	*****	0.0207	6.85	1.57
JUN 4,88	JUN 3,88	45.0	44.0		*****	UG 7.61	*****	0.0154	6.25	0.69
JUN 9,88	JUN 8,88	43.0	!IS *****		*****	UG 7.21	*****	0.0165	!IS *****	!IS *****
JUN 16,88	JUN 15,88	292.0	37.0		3.88	6.69	*****	0.0222	8.30	1.04
JUN 23,88	JUN 22,88	11.0	*****		*****	*****	*****	*****	*****	*****
JUN 29,88	JUN 28,88	25.0	8.5		*****	UG 7.08	*****	0.0146	LG 0.75	LG 0.12
JUL 11,88	JUL 10,88	58.0	> 100.0		*****	3.39	*****	0.0404	UG 18.00	2.20
JUL 12,88	JUL 11,88	857.0	20.5		3.61	5.08	*****	0.0279	3.85	0.56
JUL 16,88	JUL 15,88	1194.0	55.5		*****	3.98	*****	0.1180	5.70	1.00
JUL 17,88	JUL 16,88	1753.0	18.0		3.90	4.50	*****	0.0476	1.90	0.29
JUL 21,88	JUL 20,88	*****	*****		*****	*****	*****	*****	*****	*****

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ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : WELLESLEY/DAILY/AEROCHEM

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REMOVAL DATE	EXPOSURE DATE	SAMPLING START/END HR. HR.	PRECIP START/END HR. HR.	SAMPLE TYPE 01-RAIN 02-SNOW 03-COMP/04-OTHER	GAUGE DEPTH(MM)	GAUGE TYPE 01-STD. 02-NIPHER	SAMPLE NUMBER	PROJECT CODE 02-APIOS 03-SPECIAL	SUBPROJECT CODE 01-MOE 03-AES	SAMPLER EFFICI- ENCY (%)	COMMENTS FIELD OFFICE
JUL 22,88	JUL 21,88	530 530	1630 1900	1	2.3	1	62997	2	1	84	J
JUL 23,88	JUL 22,88	530 530	1700 2000	1	7.1	1	62999	2	1	93	J
JUL 24,88	JUL 23,88	530 530	****	1	6.0	1	70001	2	1	93	J
JUL 25,88	JUL 24,88	530 530	1200 300	1	2.7	1	70003	2	1	83	JH
JUL 26,88	JUL 25,88	530 530	1830 1900	1	0.2	1	70005	2	1	****	E
AUG 2,88	JUL 28,88	530 1210	****	1	57.2	1	70007	2	1	80	Q
AUG 5,88	AUG 4,88	530 530	1550 2000	1	16.2	1	70009	2	1	106	A
AUG 6,88	AUG 5,88	530 930	1900 2300	1	5.8	1	70011	2	1	91	C
AUG 10,88	AUG 9,88	530 530	1730 2000	1	4.3	1	70013	2	1	49	NJ
AUG 12,88	AUG 11,88	530 530	1300 1500	1	8.8	1	70015	2	1	103	J
AUG 14,88	AUG 13,88	530 530	1700 2000	1	3.1	1	70017	2	1	83	
AUG 24,88	AUG 23,88	400 400	1600 1800	1	2.7	1	70019	2	1	111	TC
AUG 25,88	AUG 24,88	400 400	1100 1300	1	14.5	1	70021	2	1	104	NJ
AUG 26,88	AUG 25,88	400 400	800 900	1	0.7	1	70023	2	1	113	HM
AUG 27,88	AUG 26,88	400 1130	2300 200	1	1.5	1	70025	2	1	91	H
SEP 3,88	SEP 2,88	700 730	****	1	44.9	1	70027	2	1	102	
SEP 4,88	SEP 3,88	730 630	****	1	12.0	1	70029	2	1	98	
SEP 5,88	SEP 4,88	630 800	630 900	1	5.9	1	70031	2	1	79	
SEP 13,88	SEP 12,88	530 530	130 530	1	4.8	1	70034	2	1	87	J
SEP 17,88	SEP 16,88	530 530	****	1	3.5	1	70036	2	1	102	
SEP 18,88	SEP 17,88	530 800	****	1	1.2	1	70038	2	1	61	
SEP 19,88	SEP 18,88	800 530	****	1	1.8	1	70040	2	1	84	
SEP 20,88	SEP 19,88	530 700	****	1	3.5	1	70042	2	1	92	AB
SEP 21,88	SEP 20,88	700 530	****	1	1.8	2	70044	2	1	71	H
SEP 22,88	SEP 21,88	530 530	900 930	1	0.7	1	70046	2	1	35	A
SEP 23,88	SEP 22,88	530 530	100 400	1	9.9	1	70048	2	1	102	J
SEP 24,88	SEP 23,88	530 530	****	1	0.9	1	70050	2	1	43	
SEP 28,88	SEP 27,88	530 530	1900 ****	1	5.1	1	63960	2	1	92	C
OCT 1,88	SEP 30,88	530 700	****	1	3.0	1	70053	2	1	85	A
OCT 2,88	OCT 1,88	530 600	****	1	9.2	1	70055	2	1	94	C
OCT 3,88	OCT 2,88	600 530	600 1300	1	10.6	1	70057	2	1	106	C
OCT 5,88	OCT 4,88	530 530	1300 1400	1	0.9	1	70059	2	1	74	
OCT 6,88	OCT 5,88	530 530	****	1	0.3	1	70061	2	1	****	E
OCT 7,88	OCT 6,88	530 530	1500 1630	1	2.4	1	70063	2	1	79	N
OCT 8,88	OCT 7,88	530 530	1000 1300	1	2.0	1	70065	2	1	60	J
OCT 9,88	OCT 8,88	530 530	****	1	1.1	1	70067	2	1	****	HM
OCT 11,88	OCT 10,88	530 530	2000 2400	1	43.0	1	70069	2	1	104	E
OCT 12,88	OCT 11,88	530 530	2000 ****	1	2.6	1	70071	2	1	86	C
OCT 17,88	OCT 16,88	530 530	1930 2130	1	1.6	1	70073	2	1	74	A
OCT 18,88	OCT 17,88	530 530	2200 400	1	13.0	1	70075	2	1	106	H

ONTARIO MINISTRY OF THE ENVIRONMENT
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APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : WELLESLEY/DAILY/AEROCHEM				#04		PAGE : 8					
REMOVAL DATE	EXPOSURE DATE	VOLUME ML	CONDUCT. UMHO/CM	PH FIELD	PH LAB	TOTAL H+ TO PH8.3 MG/L	TOTAL H+ GRAN MG/L	SULPHATE MG/L	NITRATE AS N MG/L		
JUL 22,88	JUL 21,88	124.0	30.0	UG	6.26	UG	7.23	*****	0.0204	3.70	1.06
JUL 23,88	JUL 22,88	427.0	18.0	UG	5.42	UG	6.89	*****	0.0167	2.45	0.63
JUL 24,88	JUL 23,88	361.0	44.0		4.31		4.02	*****	0.1110	3.05	0.92
JUL 25,88	JUL 24,88	145.0	16.0		3.67		5.23	*****	0.0276	2.35	0.52
JUL 26,88	JUL 25,88	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
AUG 2,88	JUL 28,88	2937.0	33.5		3.77		4.16	*****	0.0850	3.95	0.43
AUG 5,88	AUG 4,88	1103.0	80.5		3.57		3.81	*****	0.1920	9.75	0.73
AUG 6,88	AUG 5,88	340.0	63.5		3.74		4.06	*****	0.1140	4.10	0.59
AUG 10,88	AUG 9,88	136.0	72.5		3.58		3.95	*****	0.1400	9.75	1.52
AUG 12,88	AUG 11,88	584.0	57.5		3.55		3.93	*****	0.1430	6.20	0.78
AUG 14,88	AUG 13,88	166.0	63.0		3.49		3.84	*****	0.1630	7.20	0.88
AUG 24,88	AUG 23,88	193.0	> 100.0	LG	3.13		3.38	*****	0.3960	15.60	2.34
AUG 25,88	AUG 24,88	970.0	13.0		4.05		4.72	*****	0.0378	2.00	0.30
AUG 26,88	AUG 25,88	51.0	6.5	*****	*****	*****	6.52	*****	0.0190	1.20	0.21
AUG 27,88	AUG 26,88	88.0	84.0	*****	*****	*****	3.76	*****	0.2010	9.35	1.95
SEP 3,88	SEP 2,88	2951.0	40.5		3.89		4.06	*****	0.1170	4.60	0.44
SEP 4,88	SEP 3,88	761.0	55.0	*****	*****	*****	3.92	*****	0.1510	5.30	0.70
SEP 5,88	SEP 4,88	299.0	21.5		4.12		4.28	*****	0.0723	2.90	0.28
SEP 13,88	SEP 12,88	270.0	29.0		3.81		4.31	*****	0.0757	4.30	0.62
SEP 17,88	SEP 16,88	229.0	75.0		3.59		3.83	*****	0.2160	10.90	1.13
SEP 18,88	SEP 17,88	47.0	71.5	*****	*****	!IS	*****	*****	!IS	*****	2.30
SEP 19,88	SEP 18,88	97.0	34.5	*****	*****	*****	4.86	*****	0.0447	6.70	1.26
SEP 20,88	SEP 19,88	208.0	37.0		3.89		4.17	*****	0.1190	6.95	0.76
SEP 21,88	SEP 20,88	83.0	18.0	*****	*****	UG	7.05	*****	0.0225	4.40	0.51
SEP 22,88	SEP 21,88	16.0	LG 3.0	*****	*****	!IR	*****	*****	!IR	*****	0.04
SEP 23,88	SEP 22,88	649.0	12.0		4.17		4.61	*****	0.0492	1.40	0.21
SEP 24,88	SEP 23,88	25.0	16.5	*****	*****	UG	7.15	*****	0.0225	2.40	0.67
SEP 28,88	SEP 27,88	302.0	21.5		4.68		4.79	*****	0.0425	6.00	0.94
OCT 1,88	SEP 30,88	165.0	33.5		4.29		4.37	*****	0.0717	7.40	LG 0.06
OCT 2,88	OCT 1,88	557.0	12.5		4.44		4.35	*****	0.0655	1.95	0.37
OCT 3,88	OCT 2,88	721.0	9.5		4.43		4.48	*****	0.0498	1.65	LG 0.12
OCT 5,88	OCT 4,88	43.0	31.0	*****	*****	*****	3.80	*****	D 0.2040	7.85	<T 0.03
OCT 6,88	OCT 5,88	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
OCT 7,88	OCT 6,88	122.0	15.0	UG	6.34	UG	7.30	*****	0.0267	4.90	<W 0.01
OCT 8,88	OCT 7,88	78.0	12.5	*****	*****	*****	5.35	*****	0.0285	2.75	<T 0.01
OCT 9,88	OCT 8,88	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
OCT 11,88	OCT 10,88	2875.0	LG 4.0	UG	5.18		5.76	*****	0.0229	1.15	<W 0.01
OCT 12,88	OCT 11,88	144.0	LG 4.5	UG	6.10		6.70	*****	0.0218	0.80	<T 0.03
OCT 17,88	OCT 16,88	76.0	D 38.0	*****	*****	UG	6.88	*****	0.0254	7.15	1.07
OCT 18,88	OCT 17,88	887.0	23.0		4.18		4.31	*****	0.0759	2.60	0.42

ONTARIO MINISTRY OF THE ENVIRONMENT
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APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : WELLESLEY/DAILY/AEROCHEM				#04	PAGE : 9				
REMOVAL DATE	EXPOSURE DATE	CALCIUM MG/L	CHLORIDE MG/L	MAGNESIM MG/L	POTASSIM MG/L	SODIUM MG/L	AMMONIUM AS N MG/L	FREE H+ LAB MG/L	
JUL 22,88	JUL 21,88	1.64	0.25	0.305	0.070	0.045	1.650	UG 0.0001	
JUL 23,88	JUL 22,88	0.68	0.11	0.180	0.045	<T 0.015	1.180	UG 0.0001	
JUL 24,88	JUL 23,88	0.14	0.19	0.025	<T 0.020	0.050	0.358	0.0955	
JUL 25,88	JUL 24,88	0.18	0.08	0.055	0.045	<T 0.015	1.000	0.0059	
JUL 26,88	JUL 25,88	*****	*****	*****	*****	*****	*****	*****	
AUG 2,88	JUL 28,88	0.26	0.09	0.040	<T 0.015	<T 0.015	0.488	0.0692	
AUG 5,88	AUG 4,88	0.48	0.17	0.100	0.030	0.030	0.970	0.1549	
AUG 6,88	AUG 5,88	0.24	0.08	0.045	0.030	0.030	0.376	0.0871	
AUG 10,88	AUG 9,88	D 2.10	0.34	D 0.350	0.055	0.075	0.926	0.1122	
AUG 12,88	AUG 11,88	0.54	0.18	0.105	0.030	0.030	0.546	0.1175	
AUG 14,88	AUG 13,88	0.44	0.33	0.070	0.045	0.110	0.610	0.1445	
AUG 24,88	AUG 23,88	0.48	0.69	0.115	0.060	0.030	1.800	0.4169	
AUG 25,88	AUG 24,88	0.18	0.07	0.040	0.035	0.040	0.340	0.0191	
AUG 26,88	AUG 25,88	0.26	0.07	0.085	0.045	0.030	0.316	0.0003	
AUG 27,88	AUG 26,88	1.40	0.46	0.280	0.180	0.045	1.770	0.1738	
SEP 3,88	SEP 2,88	0.20	0.06	0.040	<T 0.020	<T 0.010	0.546	0.0871	
SEP 4,88	SEP 3,88	<W 0.02	0.68	<T 0.005	<T 0.020	<T 0.010	0.656	0.1202	
SEP 5,88	SEP 4,88	<W 0.02	<T 0.05	<T 0.010	<T 0.015	<T 0.005	0.450	0.0525	
SEP 13,88	SEP 12,88	0.32	0.12	0.065	0.035	0.035	0.816	0.0490	
SEP 17,88	SEP 16,88	1.06	0.26	D 0.285	0.050	0.055	1.290	0.1479	
SEP 18,88	SEP 17,88	1.12	0.31	0.210	0.170	0.115	UG 3.350	!IS *****	
SEP 19,88	SEP 18,88	0.80	0.20	0.165	0.110	0.045	2.280	0.0138	
SEP 20,88	SEP 19,88	0.46	0.34	0.105	U 2.400	0.100	D 1.220	0.0676	
SEP 21,88	SEP 20,88	0.26	0.15	0.045	0.040	0.025	1.830	UG 0.0001	
SEP 22,88	SEP 21,88	<T 0.06	<T 0.02	<T 0.010	0.040	0.030	0.356	!IR *****	
SEP 23,88	SEP 22,88	0.10	<T 0.02	<T 0.015	<T 0.005	<T 0.015	0.260	0.0245	
SEP 24,88	SEP 23,88	0.24	0.09	0.050	0.045	0.040	1.840	UG 0.0001	
SEP 28,88	SEP 27,88	1.50	0.19	0.290	0.055	0.040	1.110	0.0162	
OCT 1,88	SEP 30,88	1.28	0.35	0.325	0.085	0.095	U 1.660	0.0427	
OCT 2,88	OCT 1,88	<T 0.10	0.08	<T 0.020	<T 0.015	0.035	0.390	0.0447	
OCT 3,88	OCT 2,88	<W 0.02	<W 0.01	<W 0.005	<W 0.005	<T 0.010	0.240	0.0331	
OCT 5,88	OCT 4,88	!IS *****	0.76	!IS *****	!IS *****	!IS *****	UG 2.590	0.1585	
OCT 6,88	OCT 5,88	*****	*****	*****	*****	*****	*****	*****	
OCT 7,88	OCT 6,88	0.70	0.09	0.200	0.035	0.045	1.490	UG 0.0001	
OCT 8,88	OCT 7,88	0.40	0.15	0.110	<T 0.015	0.035	1.080	0.0045	
OCT 9,88	OCT 8,88	*****	*****	*****	*****	*****	*****	*****	
OCT 11,88	OCT 10,88	0.12	<W 0.01	<T 0.020	<T 0.020	<W 0.005	0.406	0.0017	
OCT 12,88	OCT 11,88	0.20	<T 0.04	0.060	<T 0.020	<T 0.015	0.386	0.0002	
OCT 17,88	OCT 16,88	3.06	0.30	0.710	0.135	0.140	1.220	UG 0.0001	
OCT 18,88	OCT 17,88	D 0.52	<T 0.04	<T 0.020	<W 0.005	<T 0.025	0.350	0.0490	

ONTARIO MINISTRY OF THE ENVIRONMENT
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STATION NAME : WELLESLEY/DAILY/AEROCHEM

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REMOVAL DATE	EXPOSURE DATE	SAMPLING START/END HR. HR.	PRECIP START/END HR. HR.	SAMPLE TYPE 01-RAIN 02-SNOW 03-COMP/04-OTHER	GAUGE DEPTH(MM)	GAUGE TYPE 01-STD. 02-NIPHER	SAMPLE NUMBER	PROJECT CODE 02-APIOS 03-SPECIAL	SUBPROJECT CODE 01-MOE 03-AES	SAMPLER EFFICI- ENCY (%)	COMMENTS FIELD OFFICE
OCT 19,88	OCT 18,88	530 530	700 1800	1	0.8	1	70077	2	1	48	
OCT 22,88	OCT 21,88	530 530	1300 1700	1	5.1	1	70079	2	1	106	A
OCT 24,88	OCT 23,88	530 530	600 900	1	5.6	1	70081	2	1	103	J
OCT 25,88	OCT 24,88	530 530	1300 2200	1	12.1	1	70083	2	1	89	JHM
OCT 26,88	OCT 25,88	530 530	**** 530	3	4.3	1	70085	2	1	97	J
OCT 27,88	OCT 26,88	530 530	530 1000	3	7.8	2	70087	2	1	92	JHM
OCT 28,88	OCT 27,88	530 530	**** 530	1	4.1	2	70089	2	1	117	J
OCT 29,88	OCT 28,88	530 800	530 900	1	1.5	2	70091	2	1	95	
NOV 1,88	OCT 31,88	530 530	**** 400	1	0.4	2	70093	2	1	179	NH
NOV 2,88	NOV 1,88	530 530	1800 2000	1	0.2	1	70095	2	1	124	NH
NOV 4,88	NOV 3,88	530 530	300 530	1	1.3	1	70097	2	1	140	N
NOV 5,88	NOV 4,88	530 800	530 530	1	4.5	1	70099	2	1	109	
NOV 6,88	NOV 5,88	800 1100	2000 1100	1	16.4	1	70101	2	1	110	NC
NOV 7,88	NOV 6,88	1100 600	**** ****	3	3.0	1	70105	2	1	73	
NOV 9,88	NOV 8,88	530 530	600 1100	1	10.6	2	72338	2	1	99	
NOV 10,88	NOV 9,88	530 530	**** 530	1	11.8	2	72340	2	1	105	
NOV 11,88	NOV 10,88	530 530	530 1130	1	7.2	2	72342	2	1	65	
NOV 13,88	NOV 12,88	800 800	**** 1000	1	15.3	2	72344	2	1	103	
NOV 17,88	NOV 16,88	530 530	1500 1800	1	3.4	2	72348	2	1	125	NH
NOV 20,88	NOV 19,88	800 1400	1400 1800	3	7.0	2	72350	2	1	104	HCM
NOV 21,88	NOV 20,88	1400 530	1400 2000	1	12.6	2	72352	2	1	91	M
NOV 27,88	NOV 26,88	530 1200	200 200	1	3.5	2	70107	2	1	107	
NOV 29,88	NOV 28,88	530 530	400 400	2	1.6	2	70109	2	1	59	
NOV 30,88	NOV 29,88	530 530	**** ****	2	0.1	2	70111	2	1	****	E
DEC 1,88	NOV 30,88	530 530	400 400	2	4.3	2	70113	2	1	50	NH
DEC 2,88	DEC 1,88	530 530	**** ****	2	1.0	2	70115	2	1	32	HM
DEC 9,88	DEC 8,88	530 530	**** ****	2	0.7	2	70117	2	1	95	
DEC 11,88	DEC 10,88	530 530	700 1600	2	1.8	2	70119	2	1	44	N
DEC 13,88	DEC 12,88	530 530	530 530	2	1.5	2	70121	2	1	35	N
DEC 14,88	DEC 13,88	530 530	530 200	2	1.3	2	70123	2	1	51	
DEC 15,88	DEC 14,88	530 530	1100 1400	3	2.0	2	70125	2	1	71	C
DEC 16,88	DEC 15,88	530 530	530 200	2	1.1	2	70127	2	1	32	
DEC 18,88	DEC 17,88	730 1100	1500 1700	2	1.6	2	70129	2	1	52	
DEC 19,88	DEC 18,88	1100 530	1500 2200	2	1.6	2	70131	2	1	9	
DEC 20,88	DEC 19,88	530 530	2200 300	3	0.5	2	70133	2	1	****	EF
DEC 21,88	DEC 20,88	530 530	**** ****	1	2.1	2	70135	2	1	****	CDE
DEC 23,88	DEC 22,88	530 530	2200 530	3	7.3	2	70137	2	1	83	N
DEC 24,88	DEC 23,88	530 530	**** ****	3	3.7	2	70139	2	1	108	J
DEC 25,88	DEC 24,88	530 530	**** ****	3	3.2	2	70141	2	1	58	HM
DEC 27,88	DEC 26,88	530 530	530 2000	3	11.8	2	70143	2	1	67	Q

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : WELLESLEY/DAILY/AEROCHEM

#04

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REMOVAL DATE	EXPOSURE DATE	VOLUME ML	CONDUCT. UMHO/CM	PH FIELD	PH LAB	TOTAL H+ TO PH8.3 MG/L	TOTAL H+ GRAN MG/L	SULPHATE MG/L	NITRATE AS N MG/L		
OCT 19,88	OCT 18,88	25.0	6.0	*****	UG	7.33	*****	0.0176	0.90	LQ	0.07
OCT 22,88	OCT 21,88	347.0	33.0	3.79		4.22	*****	0.0936	3.30		0.90
OCT 24,88	OCT 23,88	370.0	28.0	3.79		4.19	*****	0.0891	2.20		0.74
OCT 25,88	OCT 24,88	692.0	11.0	4.24		4.69	*****	0.0480	1.35	<T	0.02
OCT 26,88	OCT 25,88	270.0	8.7	4.24		5.15	*****	0.0281	1.55		0.22
OCT 27,88	OCT 26,88	462.0	4.0	4.42		5.31	*****	0.0258	0.80	<W	0.01
OCT 28,88	OCT 27,88	309.0	31.5	3.55		4.12	*****	0.1020	2.40		0.77
OCT 29,88	OCT 28,88	92.0	35.0	*****		4.13	*****	0.0996	2.70		1.13
NOV 1,88	OCT 31,88	46.0	24.5	*****	D	4.94	*****	0.0349	3.85		1.41
NOV 2,88	NOV 1,88	16.0	22.0	*****		5.17	*****	0.0286	4.40		0.89
NOV 4,88	NOV 3,88	117.0	64.0	3.83		3.94	*****	0.1650	6.70		1.73
NOV 5,88	NOV 4,88	315.0	33.0	4.11		4.17	*****	0.1060	4.10		0.86
NOV 6,88	NOV 5,88	1166.0	10.0	4.55		4.66	*****	0.0460	1.55		0.21
NOV 7,88	NOV 6,88	141.0	7.0	4.93		5.14	*****	0.0282	1.10		0.32
NOV 9,88	NOV 8,88	676.0	20.0	*****		4.37	*****	0.0735	2.15		0.39
NOV 10,88	NOV 9,88	798.0	32.5	*****		4.19	*****	0.0911	3.50		0.45
NOV 11,88	NOV 10,88	304.0	23.0	*****		4.32	*****	0.0726	2.85		0.44
NOV 13,88	NOV 12,88	1016.0	19.0	4.26		4.27	*****	0.0745	1.70		0.35
NOV 17,88	NOV 16,88	274.0	27.0	4.26		4.31	*****	0.1210	4.85		0.53
NOV 20,88	NOV 19,88	469.0	22.0	4.23	D	4.15	*****	0.0820	2.65		0.44
NOV 21,88	NOV 20,88	743.0	13.0	4.47		4.46	*****	0.0493	1.65	<T	0.03
NOV 27,88	NOV 26,88	242.0	60.0	3.82		3.98	*****	0.1510	7.65		0.96
NOV 29,88	NOV 28,88	61.0	!IS *****	*****		5.16	*****	0.0314	!IS *****	!IS *****	*****
NOV 30,88	NOV 29,88	*****	14.5	*****		5.06	*****	0.0478	2.30		0.59
DEC 1,88	NOV 30,88	139.0	44.5	4.19		4.35	*****	0.0928	4.10		0.41
DEC 2,88	DEC 1,88	21.0	!IS *****	*****		5.65	*****	0.0081	!IS *****	!IS *****	*****
DEC 9,88	DEC 8,88	43.0	!IS *****	*****	UG	7.11	*****	0.0144	!IS *****	!IS *****	*****
DEC 11,88	DEC 10,88	51.0	19.5	*****	UG	7.39	*****	0.0156	1.00		0.65
DEC 13,88	DEC 12,88	34.0	!IS *****	*****		4.52	*****	0.0547	!IS *****	!IS *****	*****
DEC 14,88	DEC 13,88	43.0	!IS *****	*****		4.69	*****	0.0437	1.10		1.23
DEC 15,88	DEC 14,88	92.0	!IS *****	*****		5.37	*****	0.0299	5.35		1.62
DEC 16,88	DEC 15,88	23.0	!IS *****	*****	UG	7.12	*****	0.0140	0.60		0.14
DEC 18,88	DEC 17,88	54.0	!IS *****	*****	UG	6.63	*****	0.0178	0.70		0.37
DEC 19,88	DEC 18,88	10.0	!IS *****	*****		5.95	*****	0.0157	<T 0.20	LQ	0.07
DEC 20,88	DEC 19,88	*****	*****	*****		*****	*****	*****	*****	*****	*****
DEC 21,88	DEC 20,88	*****	*****	*****		*****	*****	*****	*****	*****	*****
DEC 23,88	DEC 22,88	391.0	13.0	4.01		4.64	*****	0.0454	1.65		0.24
DEC 24,88	DEC 23,88	257.0	25.0	3.85		4.21	*****	0.0784	1.85	LQ	0.08
DEC 25,88	DEC 24,88	120.0	9.0	5.42	UG	5.28	*****	0.0331	1.55		0.37
DEC 27,88	DEC 26,88	512.0	18.5	*****		4.47	*****	0.0511	2.15		0.22

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : WELLESLEY/DAILY/AEROCHEM		#04		PAGE : 12						
REMOVAL DATE	EXPOSURE DATE	CALCIUM MG/L	CHLORIDE MG/L	MAGNESIUM MG/L	POTASSIUM MG/L	SODIUM MG/L	AMMONIUM AS N MG/L	FREE H+ LAB MG/L		
OCT 19,88	OCT 18,88	0.24	<T 0.02	0.065	<T 0.015	0.025	0.680	UG	0.0000	
OCT 22,88	OCT 21,88	0.50	0.19	0.055	<T 0.010	<T 0.020	0.786		0.0603	
OCT 24,88	OCT 23,88	0.20	0.07	<T 0.020	<T 0.015	<T 0.010	0.450		0.0646	
OCT 25,88	OCT 24,88	<T 0.04	<T 0.02	<T 0.010	<T 0.010	<T 0.005	0.316		0.0204	
OCT 26,88	OCT 25,88	<T 0.02	<T 0.02	<T 0.010	<T 0.010	<W 0.005	0.570		0.0071	
OCT 27,88	OCT 26,88	<T 0.04	<T 0.03	<T 0.015	<W 0.005	<W 0.005	0.276		0.0049	
OCT 28,88	OCT 27,88	0.30	0.08	0.025	<T 0.010	<T 0.010	0.350		0.0759	
OCT 29,88	OCT 28,88	0.24	0.15	0.025	<T 0.015	<W 0.005	0.836		0.0741	
NOV 1,88	OCT 31,88	2.00	0.18	0.405	0.125	0.035	0.800	D	0.0115	
NOV 2,88	NOV 1,88	0.66	0.19	0.120	0.045	0.055	1.790		0.0068	
NOV 4,88	NOV 3,88	0.48	0.23	0.090	0.035	0.040	1.450		0.1148	
NOV 5,88	NOV 4,88	0.34	0.38	0.045	0.030	0.195	0.920		0.0676	
NOV 6,88	NOV 5,88	<T 0.06	0.18	<T 0.020	<T 0.005	0.090	0.336		0.0219	
NOV 7,88	NOV 6,88	<T 0.08	<T 0.04	<T 0.005	<W 0.005	<T 0.005	0.500		0.0072	
NOV 9,88	NOV 8,88	<T 0.10	0.07	<T 0.015	<T 0.010	<T 0.015	0.310		0.0427	
NOV 10,88	NOV 9,88	0.26	0.50	0.045	0.030	0.245	0.240		0.0646	
NOV 11,88	NOV 10,88	0.16	0.13	0.035	0.025	0.055	0.466		0.0479	
NOV 13,88	NOV 12,88	<T 0.08	0.12	<T 0.010	<T 0.010	<T 0.015	0.186		0.0537	
NOV 17,88	NOV 16,88	1.06	0.34	0.140	0.065	0.140	0.600		0.0490	
NOV 20,88	NOV 19,88	0.20	0.11	0.050	<T 0.010	<T 0.020	0.406	D	0.0708	
NOV 21,88	NOV 20,88	<T 0.02	<T 0.03	<W 0.005	<W 0.005	<T 0.005	0.146		0.0347	
NOV 27,88	NOV 26,88	0.72	1.14	0.160	0.095	0.580	0.940		0.1047	
NOV 29,88	NOV 28,88	0.50	!IS *****	0.100	<T 0.020	0.030	1.040		0.0069	
NOV 30,88	NOV 29,88	0.44	<W 0.01	0.085	<T 0.020	0.030	0.910		0.0087	
DEC 1,88	NOV 30,88	2.05	<W 0.01	0.180	0.110	0.080	1.290		0.0447	
DEC 2,88	DEC 1,88	!IS *****	!IS *****	!IS *****	!IS *****	!IS *****	1.070		0.0022	
DEC 9,88	DEC 8,88	1.52	!IS *****	0.300	<T 0.015	0.080	0.310	UG	0.0001	
DEC 11,88	DEC 10,88	2.44	0.06	UG 0.655	0.025	0.225	0.416	UG	0.0000	
DEC 13,88	DEC 12,88	!IS *****	!IS *****	!IS *****	!IS *****	!IS *****	0.030	LG	0.0302	
DEC 14,88	DEC 13,88	!IS *****	0.55	!IS *****	!IS *****	!IS *****	0.676		0.0204	
DEC 15,88	DEC 14,88	2.16	0.76	0.260	0.165	0.295	1.360		0.0043	
DEC 16,88	DEC 15,88	!IS *****	0.66	!IS *****	!IS *****	!IS *****	0.176	UG	0.0001	
DEC 18,88	DEC 17,88	!IS *****	0.33	!IS *****	!IS *****	!IS *****	0.336	UG	0.0002	
DEC 19,88	DEC 18,88	!IS *****	0.07	!IS *****	!IS *****	!IS *****	0.066		0.0011	
DEC 20,88	DEC 19,88	*****	*****	*****	*****	*****	*****		*****	
DEC 21,88	DEC 20,88	*****	*****	*****	*****	*****	*****		*****	
DEC 23,88	DEC 22,88	0.29	<W 0.01	0.080	<T 0.005	0.030	0.150		0.0229	
DEC 24,88	DEC 23,88	<T 0.06	<W 0.01	<T 0.005	<T 0.010	<T 0.020	0.390		0.0617	
DEC 25,88	DEC 24,88	0.54	!IS *****	0.095	<T 0.025	0.120	0.456		0.0052	
DEC 27,88	DEC 26,88	0.22	0.21	0.050	<T 0.015	0.095	0.146		0.0339	

ONTARIO MINISTRY OF THE ENVIRONMENT
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 APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : WELLESLEY/DAILY/AEROCHEM

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REMOVAL DATE	EXPOSURE DATE	SAMPLING START/END HR. HR.	PRECIP START/END HR. HR.	SAMPLE TYPE 01-RAIN 02-SNOW 03-COMP/04-OTHER	GAUGE DEPTH(MM)	GAUGE TYPE 01-STD. 02-NIPHER	SAMPLE NUMBER	PROJECT CODE 02-APIOS 03-SPECIAL	SUBPROJECT CODE 01-MOE 03-AES	SAMPLER EFFICI- ENCY (%)	COMMENTS FIELD OFFICE
DEC 28,88	DEC 27,88	530 530	700 2000	1	16.0	2	70145	2	1	98	
DEC 29,88	DEC 28,88	530 530	2200 300	2	2.9	2	70149	2	1	16	N
DEC 30,88	DEC 29,88	530 530	**** ****	2	0.2	2	70151	2	1	****	E N

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PART VIII

OUT OF PROVINCE

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : PENN. STATE/DAILY/AEROCHEM

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REMOVAL DATE	EXPOSURE DATE	SAMPLING START/END HR. HR.		PRECIP START/END HR. HR.		SAMPLE TYPE 01-RAIN 02-SNOW 03-COMP/04-OTHER	GAUGE DEPTH(MM)	GAUGE TYPE 01-STD. 02-NIPHER	SAMPLE NUMBER	PROJECT CODE 02-APIOS 03-SPECIAL	SUBPROJECT CODE 01-MOE 03-AES	SAMPLER EFFICI- ENCY (%)	COMMENTS	
													FIELD	OFFICE
MAY 14,88	MAY 11,88	1300	800	****	****	1	1.6	1	59055	2	1	62		CY3
MAY 16,88	MAY 14,88	800	820	****	****	1	5.8	1	59057	2	1	101		Y2
MAY 17,88	MAY 16,88	820	815	****	****	1	6.8	1	59059	2	1	101		
MAY 18,88	MAY 17,88	815	815	700	815	1	16.6	1	59070	2	1	U 93	F	X
MAY 19,88	MAY 18,88	815	810	800	700	1	30.4	1	59072	2	1	106		
MAY 20,88	MAY 19,88	810	800	****	****	4	0.2	1	59074	2	1	31		N
MAY 21,88	MAY 20,88	800	830	****	****	1	2.4	1	59076	2	1	109		
MAY 24,88	MAY 23,88	830	800	****	****	1	5.2	1	59080	2	1	101	C	
MAY 25,88	MAY 24,88	800	830	****	****	1	10.1	1	59091	2	1	100		
JUN 2,88	MAY 31,88	745	800	****	****	1	****	1	59103	2	1	****	E	Y2
JUN 3,88	JUN 2,88	800	800	****	****	1	0.4	1	59105	2	1	58		
JUN 4,88	JUN 3,88	800	815	****	****	1	3.4	1	59107	2	1	100		
JUN 8,88	JUN 4,88	815	830	****	****	1	1.0	1	59109	2	1	93		Y4
JUN 9,88	JUN 8,88	830	750	****	****	1	12.8	1	59111	2	1	104		
JUN 17,88	JUN 15,88	815	830	****	****	1	5.2	1	59123	2	1	U 111	G	Y2
JUL 2,88	JUL 1,88	800	830	****	****	1	0.2	1	59161	2	1	70	E	
JUL 12,88	JUL 10,88	815	800	****	****	1	2.4	1	59176	2	1	122		NCZ
JUL 15,88	JUL 12,88	800	815	****	****	1	1.3	1	59178	2	1	U 84	G	Z
JUL 17,88	JUL 15,88	815	800	****	****	1	1.4	1	59180	2	1	94		Z
JUL 18,88	JUL 17,88	815	830	****	****	1	0.2	1	59182	2	1	78		X
JUL 19,88	JUL 18,88	830	830	2300	2400	1	29.0	1	59184	2	1	113		
JUL 20,88	JUL 19,88	830	810	300	500	1	6.8	1	59186	2	1	102		
JUL 21,88	JUL 20,88	810	810	200	400	1	20.9	1	59203	2	1	100		
JUL 22,88	JUL 21,88	810	830	****	****	1	9.4	1	59206	2	1	113		
JUL 24,88	JUL 22,88	830	830	****	****	1	18.0	1	59208	2	1	105		Y2
JUL 27,88	JUL 24,88	830	800	1500	1700	1	11.5	1	59209	2	1	88		Y2
JUL 31,88	JUL 27,88	800	815	****	****	1	1.8	1	59227	2	1	94	A	CY4
AUG 6,88	AUG 3,88	900	830	****	****	1	1.0	1	59248	2	1	****		NY3
AUG 7,88	AUG 6,88	830	830	****	****	1	3.0	1	59249	2	1	14		N
AUG 14,88	AUG 7,88	815	815	****	****	1	2.4	1	59266	2	1	98	C	CZ
AUG 18,88	AUG 14,88	815	820	****	****	1	0.1	1	59285	2	1	218		NY4
AUG 19,88	AUG 18,88	820	845	****	****	1	18.1	1	59287	2	1	103		
AUG 20,88	AUG 19,88	845	830	****	****	4	0.1	1	59289	2	1	****	E	N
AUG 24,88	AUG 21,88	815	815	****	****	1	31.0	1	59302	2	1	106		Y3
AUG 25,88	AUG 24,88	815	835	****	****	1	2.2	1	59311	2	1	109		
AUG 29,88	AUG 26,88	925	815	2000	815	1	72.2	1	59313	2	1	116		NY3
AUG 30,88	AUG 29,88	815	830	****	****	1	30.1	1	59315	2	1	106		NCM
SEP 4,88	AUG 31,88	900	815	****	****	1	28.8	1	59333	2	1	107		Y4
SEP 5,88	SEP 4,88	815	840	****	****	1	5.7	1	59335	2	1	87		M
SEP 13,88	SEP 12,88	845	815	****	****	1	22.0	1	59357	2	1	U 103	G	

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : PENN. STATE/DAILY/AEROCHEM

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REMOVAL DATE	EXPOSURE DATE	VOLUME ML	CONDUCT. UMHO/CM	PH FIELD	PH LAB	TOTAL H+ TO PH8.3 MG/L	TOTAL H+ GRAN MG/L	SULPHATE MG/L	NITRATE AS N MG/L
MAY 14,88	MAY 11,88	64.0	18.0	*****	3.72	*****	0.2340	10.40	2.35
MAY 16,88	MAY 14,88	379.0	79.0	*****	3.73	*****	0.2160	8.55	1.17
MAY 17,88	MAY 16,88	442.0	46.5	*****	4.18	*****	0.1000	7.15	1.10
MAY 18,88	MAY 17,88	997.0	*****	*****	*****	*****	*****	*****	*****
MAY 19,88	MAY 18,88	2067.0	24.0	*****	4.24	*****	0.0774	2.30	0.38
MAY 20,88	MAY 19,88	4.0	!RE *****	*****	!RE *****	*****	!RE *****	!RE *****	!RE *****
MAY 21,88	MAY 20,88	168.0	37.0	*****	4.08	*****	0.1090	2.95	0.80
MAY 24,88	MAY 23,88	339.0	28.0	*****	4.25	*****	0.0843	3.20	0.36
MAY 25,88	MAY 24,88	653.0	47.0	*****	3.95	*****	0.1440	4.75	0.64
JUN 2,88	MAY 31,88	3.0	!RE *****	*****	!RE *****	*****	!RE *****	!RE *****	!RE *****
JUN 3,88	JUN 2,88	15.0	!LA *****	*****	!IS *****	*****	!IS *****	!LA *****	!LA *****
JUN 4,88	JUN 3,88	220.0	40.0	*****	4.06	*****	0.1140	2.85	1.08
JUN 8,88	JUN 4,88	60.0	53.0	*****	4.12	*****	0.1230	8.80	1.16
JUN 9,88	JUN 8,88	855.0	16.0	*****	4.45	*****	0.0552	1.65	0.30
JUN 17,88	JUN 15,88	372.0	92.5	*****	3.77	*****	0.2110	9.85	0.94
JUL 2,88	JUL 1,88	9.0	*****	*****	*****	*****	*****	*****	*****
JUL 12,88	JUL 10,88	188.0	> 100.0	*****	LG 3.53	*****	UG 0.3630	15.50	1.88
JUL 15,88	JUL 12,88	70.0	!IS *****	*****	!IS *****	*****	!IS *****	!IS *****	!IS *****
JUL 17,88	JUL 15,88	85.0	> 100.0	*****	LG 3.25	*****	UG 0.6240	UG 25.50	2.46
JUL 18,88	JUL 17,88	10.0	*****	*****	*****	*****	*****	*****	*****
JUL 19,88	JUL 18,88	2105.0	50.5	*****	4.00	*****	0.1210	4.85	0.39
JUL 20,88	JUL 19,88	447.0	94.5	*****	3.68	*****	0.2280	7.35	0.99
JUL 21,88	JUL 20,88	1344.0	32.0	*****	4.18	*****	0.0817	2.35	0.37
JUL 22,88	JUL 21,88	682.0	19.0	*****	4.40	*****	0.0547	1.30	0.21
JUL 24,88	JUL 22,88	1222.0	42.0	*****	4.07	*****	0.1030	3.40	0.47
JUL 27,88	JUL 24,88	656.0	88.0	*****	3.77	*****	0.2120	8.25	0.78
JUL 31,88	JUL 27,88	109.0	> 100.0	*****	LG 3.50	*****	UG 0.3670	14.20	2.20
AUG 6,88	AUG 3,88	*****	*****	*****	*****	*****	*****	*****	*****
AUG 7,88	AUG 6,88	27.0	11.5	*****	!IR *****	*****	!IR *****	1.35	0.17
AUG 14,88	AUG 7,88	151.0	> 100.0	*****	LG 3.46	*****	UG 0.4750	UG 18.10	2.50
AUG 18,88	AUG 14,88	14.0	LG 3.0	*****	!IR *****	*****	!IR *****	0.85	LG 0.10
AUG 19,88	AUG 18,88	1206.0	17.0	*****	4.41	*****	0.0723	1.70	0.27
AUG 20,88	AUG 19,88	*****	*****	*****	*****	*****	*****	*****	*****
AUG 24,88	AUG 21,88	2114.0	29.0	*****	4.23	*****	0.0953	3.15	0.29
AUG 25,88	AUG 24,88	154.0	71.0	*****	3.91	*****	0.1900	7.85	1.28
AUG 29,88	AUG 26,88	5400.0	25.0	*****	4.31	*****	0.0845	2.85	0.22
AUG 30,88	AUG 29,88	2059.0	LG 3.0	*****	UG 5.07	*****	0.0267	0.50	LG 0.07
SEP 4,88	AUG 31,88	1980.0	13.0	*****	4.49	*****	0.0533	1.05	0.23
SEP 5,88	SEP 4,88	320.0	13.0	*****	4.46	*****	0.0586	1.05	0.17
SEP 13,88	SEP 12,88	1464.0	16.0	*****	4.43	*****	0.0588	1.70	0.22

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : PENN. STATE/DAILY/AEROCHEM

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REMOVAL DATE	EXPOSURE DATE	CALCIUM MG/L	CHLORIDE MG/L	MAGNESIUM MG/L	POTASSIUM MG/L	SODIUM MG/L	AMMONIUM AS N MG/L	FREE H+ LAB MG/L
MAY 14,88	MAY 11,88	2.18	0.82	0.225	0.275	0.175	1.230	0.1905
MAY 16,88	MAY 14,88	0.34	0.23	0.045	0.045	0.040	0.762	0.1862
MAY 17,88	MAY 16,88	0.88	0.25	0.145	0.145	0.065	1.440	0.0661
MAY 18,88	MAY 17,88	*****	*****	*****	*****	*****	*****	*****
MAY 19,88	MAY 18,88	<T 0.08	0.05	<T 0.015	<W 0.005	<T 0.020	0.194	0.0575
MAY 20,88	MAY 19,88	!IS *****	!RE *****	!IS *****	!IS *****	!IS *****	!RE *****	!RE *****
MAY 21,88	MAY 20,88	<T 0.06	0.08	<T 0.015	0.070	<T 0.020	0.348	0.0832
MAY 24,88	MAY 23,88	0.18	0.12	0.040	0.085	0.030	0.258	0.0562
MAY 25,88	MAY 24,88	0.10	0.23	<T 0.020	0.035	<T 0.015	0.366	0.1122
JUN 2,88	MAY 31,88	!IS *****	!RE *****	!IS *****	!IS *****	!IS *****	!RE *****	!RE *****
JUN 3,88	JUN 2,88	0.64	!LA *****	0.115	0.080	0.490	!LA *****	!IS *****
JUN 4,88	JUN 3,88	0.32	0.30	0.050	0.030	0.140	0.374	0.0871
JUN 8,88	JUN 4,88	1.90	0.28	0.385	0.180	0.065	0.920	0.0759
JUN 9,88	JUN 8,88	0.14	<T 0.05	0.025	<T 0.010	<T 0.005	0.168	0.0355
JUN 17,88	JUN 15,88	!IS *****	0.35	!IS *****	!IS *****	!IS *****	0.812	0.1698
JUL 2,88	JUL 1,88	*****	*****	*****	*****	*****	*****	*****
JUL 12,88	JUL 10,88	1.18	0.91	0.165	0.075	0.140	0.968	LG 0.2951
JUL 15,88	JUL 12,88	!IS *****	!IS *****	!IS *****	!IS *****	!IS *****	!IS *****	!IS *****
JUL 17,88	JUL 15,88	0.68	0.78	0.085	0.090	0.165	!IS *****	LG 0.5623
JUL 18,88	JUL 17,88	*****	*****	*****	*****	*****	*****	*****
JUL 19,88	JUL 18,88	<T 0.10	0.11	<T 0.015	<T 0.010	<T 0.010	0.336	0.1000
JUL 20,88	JUL 19,88	<T 0.04	0.20	<T 0.010	<T 0.005	<T 0.015	0.238	0.2089
JUL 21,88	JUL 20,88	<T 0.04	0.07	<T 0.010	<W 0.005	<T 0.015	0.092	0.0661
JUL 22,88	JUL 21,88	<W 0.02	<T 0.04	<T 0.005	<W 0.005	<T 0.005	0.084	0.0398
JUL 24,88	JUL 22,88	<T 0.04	0.11	<T 0.005	<T 0.015	<T 0.015	0.296	0.0851
JUL 27,88	JUL 24,88	0.18	0.22	0.030	<T 0.010	<T 0.010	0.514	0.1698
JUL 31,88	JUL 27,88	1.14	0.91	0.140	0.370	0.170	0.652	LG 0.3162
AUG 6,88	AUG 3,88	*****	*****	*****	*****	*****	*****	*****
AUG 7,88	AUG 6,88	0.14	0.10	<T 0.015	<T 0.020	0.095	0.046	!IR *****
AUG 14,88	AUG 7,88	1.38	2.35	0.200	0.095	0.080	0.820	LG 0.3467
AUG 18,88	AUG 14,88	<T 0.02	0.05	<W 0.005	<T 0.015	<T 0.015	0.040	!IR *****
AUG 19,88	AUG 18,88	<W 0.02	<T 0.03	<W 0.005	<T 0.010	<T 0.005	0.126	0.0389
AUG 20,88	AUG 19,88	*****	*****	*****	*****	*****	*****	*****
AUG 24,88	AUG 21,88	<W 0.02	0.06	<W 0.005	<T 0.015	<T 0.015	0.250	0.0589
AUG 25,88	AUG 24,88	0.42	0.46	0.080	0.135	0.065	1.190	0.1230
AUG 29,88	AUG 26,88	<T 0.04	0.12	<T 0.010	<T 0.025	0.030	0.230	0.0490
AUG 30,88	AUG 29,88	<T 0.04	<T 0.04	<W 0.005	<W 0.005	<T 0.015	0.030	UG 0.0085
SEP 4,88	AUG 31,88	<T 0.06	<W 0.01	<W 0.005	<W 0.005	<T 0.020	0.120	0.0324
SEP 5,88	SEP 4,88	<T 0.02	<W 0.01	<W 0.005	<T 0.015	<T 0.010	0.076	0.0347
SEP 13,88	SEP 12,88	<T 0.08	<T 0.05	<T 0.010	<T 0.010	<T 0.015	0.136	0.0372

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : PENN. STATE/DAILY/AEROCHEM

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REMOVAL DATE	EXPOSURE DATE	SAMPLING START/END HR. HR.	PRECIP START/END HR. HR.	SAMPLE TYPE 01-RAIN 02-SNOW 03-COMP/04-OTHER	GAUGE DEPTH(MM)	GAUGE TYPE 01-STD. 02-NIPHER	SAMPLE NUMBER	PROJECT CODE 02-APIOS 03-SPECIAL	SUBPROJECT CODE 01-MOE 03-AES	SAMPLER EFFICI- ENCY (%)	COMMENTS FIELD OFFICE	
SEP 14,88	SEP 13,88	815 930	****	****	1	0.2	1	84159	2	1	23	E N
SEP 17,88	SEP 14,88	930 815	****	****	1	7.9	1	59375	2	1	103	C Z
SEP 18,88	SEP 17,88	815 815	****	****	1	14.6	1	59377	2	1	99	
SEP 21,88	SEP 20,88	815 830	****	****	1	7.4	1	59381	2	1	105	
SEP 23,88	SEP 22,88	815 930	600 750	1	4.0	1	59401	2	1	98		
SEP 24,88	SEP 23,88	930 815	****	****	1	0.4	1	59403	2	1	42	N
SEP 25,88	SEP 24,88	815 815	****	****	1	0.6	1	59405	2	1	80	
OCT 3,88	SEP 26,88	845 900	****	****	1	4.0	1	59423	2	1	95	MZ
OCT 6,88	OCT 3,88	900 810	****	****	1	0.2	1	59425	2	1	85	Y3
OCT 8,88	OCT 6,88	810 815	****	****	1	0.2	1	59427	2	1	148	NY2
OCT 9,88	OCT 8,88	815 815	****	****	1	0.1	1	59429	2	1	****	E N
OCT 11,88	OCT 9,88	810 810	****	****	1	2.0	1	59432	2	1	101	Y2
OCT 12,88	OCT 11,88	835 825	****	****	1	1.6	1	59434	2	1	97	H
OCT 18,88	OCT 13,88	820 815	****	****	1	1.6	1	59454	2	1	92	Z
OCT 19,88	OCT 18,88	815 1000	****	****	1	1.1	1	59472	2	1	96	
OCT 20,88	OCT 19,88	1000 830	****	****	1	3.0	1	59474	2	1	98	
OCT 22,88	OCT 20,88	830 825	****	****	1	13.8	1	59476	2	1	96	NZ
OCT 23,88	OCT 22,88	825 825	****	****	1	3.0	1	59478	2	1	81	
OCT 24,88	OCT 23,88	825 845	****	****	1	7.6	1	59481	2	1	100	
OCT 25,88	OCT 24,88	845 815	****	****	3	0.6	1	59482	2	1	36	
OCT 28,88	OCT 26,88	1000 900	****	****	1	1.0	1	59501	2	1	87	Z
OCT 29,88	OCT 28,88	900 830	****	****	1	0.9	1	59503	2	1	55	
NOV 2,88	OCT 29,88	830 910	****	****	1	2.0	1	59520	2	1	U 101	CG Z
NOV 3,88	NOV 2,88	910 815	****	****	1	0.3	1	59538	2	1	103	NC
NOV 4,88	NOV 3,88	815 915	****	****	1	8.2	1	59541	2	1	101	
NOV 5,88	NOV 4,88	915 800	****	****	1	4.4	1	59542	2	1	103	Q
NOV 6,88	NOV 5,88	800 815	****	****	1	26.6	1	59544	2	1	106	N
NOV 7,88	NOV 6,88	815 900	****	****	3	2.0	1	59547	2	1	87	
NOV 9,88	NOV 8,88	830 945	****	****	3	0.4	2	59550	2	1	210	NC
NOV 11,88	NOV 9,88	950 830	****	****	1	1.0	2	59552	2	1	182	NCZ
NOV 13,88	NOV 11,88	830 800	****	****	1	6.8	2	59554	2	1	119	CZ
NOV 14,88	NOV 13,88	800 858	****	****	1	8.2	2	59557	2	1	79	
NOV 17,88	NOV 15,88	830 800	****	****	1	1.7	2	59578	2	1	147	NCZ
NOV 20,88	NOV 17,88	810 800	****	****	3	13.9	2	59580	2	1	99	NZ
NOV 21,88	NOV 20,88	800 800	****	****	1	20.4	2	59582	2	1	93	N
NOV 27,88	NOV 21,88	800 800	****	****	1	0.9	2	59600	2	1	161	NHMZ
NOV 28,88	NOV 27,88	800 900	****	****	1	0.8	2	59602	2	1	89	
NOV 29,88	NOV 28,88	900 830	****	****	2	0.7	2	59620	2	1	6	E N
DEC 11,88	DEC 6,88	815 800	****	****	2	1.2	2	59641	2	1	52	Z
DEC 12,88	DEC 11,88	800 930	****	****	2	1.4	2	59643	2	1	82	

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : PENN. STATE/DAILY/AEROCHEM

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REMOVAL DATE	EXPOSURE DATE	VOLUME ML	CONDUCT. UMHO/CM	PH FIELD	PH LAB	TOTAL H+ TO PH8.3 MG/L	TOTAL H+ GRAN MG/L	SULPHATE MG/L	NITRATE AS N MG/L
SEP 14,88	SEP 13,88	3.0	*****	*****	*****	*****	*****	*****	*****
SEP 17,88	SEP 14,88	523.0	!IS *****	*****	!BT *****	*****	!BT *****	!IS *****	!IS *****
SEP 18,88	SEP 17,88	934.0	15.0	*****	4.41	*****	0.0606	1.85	LG 0.10
SEP 21,88	SEP 20,88	502.0	8.0	*****	4.67	*****	0.0392	0.95	LG 0.11
SEP 23,88	SEP 22,88	253.0	40.5	*****	4.00	*****	0.1240	4.40	0.53
SEP 24,88	SEP 23,88	11.0	24.5	*****	UG 5.51	*****	LG 0.0169	2.30	0.40
SEP 25,88	SEP 24,88	31.0	19.0	*****	4.19	*****	0.0876	1.45	0.40
OCT 3,88	SEP 26,88	245.0	41.0	*****	3.90	*****	0.1520	3.80	0.38
OCT 6,88	OCT 3,88	11.0	14.0	*****	4.18	*****	0.0949	1.10	<M 0.01
OCT 8,88	OCT 6,88	19.0	69.0	*****	!IS *****	*****	!IS *****	1.85	1.47
OCT 9,88	OCT 8,88	*****	*****	*****	*****	*****	*****	*****	*****
OCT 11,88	OCT 9,88	130.0	58.0	*****	3.95	*****	0.1410	4.65	1.07
OCT 12,88	OCT 11,88	100.0	18.0	*****	4.39	*****	0.0663	1.75	0.40
OCT 18,88	OCT 13,88	95.0	35.0	*****	4.18	*****	0.0914	3.60	0.78
OCT 19,88	OCT 18,88	68.0	!IS *****	*****	4.26	*****	0.0802	!IS *****	!IS *****
OCT 20,88	OCT 19,88	190.0	43.0	*****	3.97	*****	0.1240	2.25	0.89
OCT 22,88	OCT 20,88	857.0	24.0	*****	4.24	*****	0.0764	1.50	0.56
OCT 23,88	OCT 22,88	156.0	29.0	*****	4.13	*****	0.0902	1.45	0.64
OCT 24,88	OCT 23,88	490.0	17.5	*****	4.43	*****	0.0561	1.75	0.40
OCT 25,88	OCT 24,88	14.0	11.0	*****	UG 5.33	*****	0.0229	3.10	0.17
OCT 28,88	OCT 26,88	56.0	31.0	*****	4.15	*****	0.0923	2.50	0.69
OCT 29,88	OCT 28,88	32.0	31.0	*****	4.25	*****	0.1920	3.75	0.43
NOV 2,88	OCT 29,88	130.0	!RE *****	*****	!RE *****	*****	!RE *****	!RE *****	!RE *****
NOV 3,88	NOV 2,88	20.0	50.5	*****	4.23	*****	0.0820	3.55	0.83
NOV 4,88	NOV 3,88	532.0	25.0	*****	4.23	*****	0.0792	2.45	0.37
NOV 5,88	NOV 4,88	293.0	28.0	*****	4.22	*****	0.0827	2.75	0.46
NOV 6,88	NOV 5,88	1810.0	LG 6.0	*****	UG 4.83	*****	0.0329	0.80	0.09
NOV 7,88	NOV 6,88	112.0	27.5	*****	4.24	*****	0.0794	2.60	0.48
NOV 9,88	NOV 8,88	54.0	31.0	*****	3.88	*****	0.1890	5.95	1.21
NOV 11,88	NOV 9,88	117.0	34.0	*****	4.05	*****	0.1310	4.70	0.88
NOV 13,88	NOV 11,88	519.0	29.0	*****	4.38	*****	0.0670	1.85	0.35
NOV 14,88	NOV 13,88	416.0	17.5	*****	4.40	*****	0.0531	1.59	0.20
NOV 17,88	NOV 15,88	161.0	21.0	*****	4.15	*****	0.1070	4.15	0.79
NOV 20,88	NOV 17,88	887.0	12.5	*****	4.53	*****	0.0410	0.95	0.23
NOV 21,88	NOV 20,88	1218.0	!IS *****	*****	4.73	*****	0.0347	!IS *****	!IS *****
NOV 27,88	NOV 21,88	93.0	!IR *****	*****	3.92	*****	0.1390	5.05	1.17
NOV 28,88	NOV 27,88	46.0	!IS *****	*****	4.48	*****	0.0531	!IS *****	!IS *****
NOV 29,88	NOV 28,88	3.0	*****	*****	*****	*****	*****	*****	*****
DEC 11,88	DEC 6,88	40.0	!IS *****	*****	4.59	*****	0.0466	!IS *****	!IS *****
DEC 12,88	DEC 11,88	74.0	!IR *****	*****	4.43	*****	0.0554	0.75	0.54

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : PENN. STATE/DAILY/AEROCHEM

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REMOVAL DATE	EXPOSURE DATE	CALCIUM MG/L	CHLORIDE MG/L	MAGNESIM MG/L	POTASSIM MG/L	SODIUM MG/L	AMMONIUM AS N MG/L	FREE H+ LAB MG/L
SEP 14,88	SEP 13,88	*****	*****	*****	*****	*****	*****	*****
SEP 17,88	SEP 14,88	!IS *****	!IS *****	!IS *****	!IS *****	!IS *****	<W 0.006	!BT *****
SEP 18,88	SEP 17,88	<T 0.02	0.11	<W 0.005	<T 0.015	<T 0.010	0.140	0.0389
SEP 21,88	SEP 20,88	<T 0.02	<T 0.05	<T 0.005	<T 0.010	0.025	0.116	0.0214
SEP 23,88	SEP 22,88	0.28	0.25	0.035	0.030	0.105	0.266	0.1000
SEP 24,88	SEP 23,88	!IS *****	0.17	!IS *****	!IS *****	!IS *****	0.120	UG 0.0031
SEP 25,88	SEP 24,88	!IS *****	0.12	!IS *****	!IS *****	!IS *****	0.140	0.0646
OCT 3,88	SEP 26,88	<T 0.10	0.26	<T 0.010	<T 0.010	0.030	0.196	0.1259
OCT 6,88	OCT 3,88	!IS *****	0.18	!IS *****	!IS *****	!IS *****	0.116	0.0661
OCT 8,88	OCT 6,88	!IS *****	1.34	!IS *****	!IS *****	!IS *****	0.060	!IS *****
OCT 9,88	OCT 8,88	*****	*****	*****	*****	*****	*****	*****
OCT 11,88	OCT 9,88	0.54	0.25	0.075	0.030	0.025	0.476	0.1122
OCT 12,88	OCT 11,88	0.48	0.26	0.055	0.030	<T 0.020	0.206	0.0407
OCT 18,88	OCT 13,88	0.50	0.26	0.065	0.030	0.185	0.290	0.0661
OCT 19,88	OCT 18,88	!IS *****	!IS *****	!IS *****	!IS *****	!IS *****	!RE *****	0.0550
OCT 20,88	OCT 19,88	<T 0.06	0.54	<T 0.015	<T 0.005	<T 0.010	0.160	0.1072
OCT 22,88	OCT 20,88	<T 0.04	0.17	<W 0.005	<W 0.005	<T 0.010	0.230	0.0575
OCT 23,88	OCT 22,88	<T 0.04	0.21	<W 0.005	<T 0.005	<T 0.015	<T 0.020	0.0741
OCT 24,88	OCT 23,88	0.14	0.07	<T 0.020	<T 0.015	0.105	0.150	0.0372
OCT 25,88	OCT 24,88	0.60	0.28	0.110	0.050	UG 0.725	0.086	UG 0.0047
OCT 28,88	OCT 26,88	0.24	0.14	0.025	<T 0.015	0.040	0.106	0.0708
OCT 29,88	OCT 28,88	0.34	0.14	0.045	<T 0.020	0.050	0.176	0.0562
NOV 2,88	OCT 29,88	!RE *****	!RE *****	!RE *****	!RE *****	!RE *****	!RE *****	!RE *****
NOV 3,88	NOV 2,88	0.24	0.25	0.035	<T 0.025	0.040	0.606	0.0589
NOV 4,88	NOV 3,88	<T 0.10	0.14	<T 0.015	<T 0.010	0.035	0.150	0.0589
NOV 5,88	NOV 4,88	<T 0.10	0.54	0.035	0.025	0.305	0.266	0.0603
NOV 6,88	NOV 5,88	<T 0.02	0.11	<T 0.005	<T 0.005	0.030	0.076	UG 0.0148
NOV 7,88	NOV 6,88	<T 0.06	0.22	<T 0.010	<T 0.015	<T 0.010	0.266	0.0575
NOV 9,88	NOV 8,88	0.57	0.61	0.050	0.100	0.170	0.446	0.1318
NOV 11,88	NOV 9,88	0.26	0.52	0.030	0.045	0.105	0.640	0.0891
NOV 13,88	NOV 11,88	<T 0.04	0.35	0.025	<T 0.025	0.215	0.160	0.0417
NOV 14,88	NOV 13,88	<W 0.02	<W 0.01	<W 0.005	<T 0.010	<T 0.015	0.190	0.0398
NOV 17,88	NOV 15,88	0.68	0.25	0.065	0.050	0.130	0.390	0.0708
NOV 20,88	NOV 17,88	<W 0.02	<W 0.01	<W 0.005	<W 0.005	<T 0.005	0.060	0.0295
NOV 21,88	NOV 20,88	<T 0.06	!IS *****	<T 0.020	0.040	0.095	0.080	0.0186
NOV 27,88	NOV 21,88	<W 0.02	1.85	<W 0.005	<T 0.005	0.025	0.740	0.1202
NOV 28,88	NOV 27,88	0.22	!IS *****	0.170	0.125	1.340	0.236	0.0331
NOV 29,88	NOV 28,88	*****	*****	*****	*****	*****	*****	*****
DEC 11,88	DEC 6,88	1.44	!IS *****	0.105	0.135	0.265	0.130	0.0257
DEC 12,88	DEC 11,88	0.47	1.17	0.075	0.035	0.295	0.060	0.0372

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : PENN. STATE/DAILY/AEROCHEM

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REMOVAL DATE	EXPOSURE DATE	SAMPLING START/END HR. HR.	PRECIP START/END HR. HR.	SAMPLE TYPE 01-RAIN 02-SNOW 03-COMP/04-OTHER	GAUGE DEPTH(MM)	GAUGE TYPE 01-STD. 02-NIPHER	SAMPLE NUMBER	PROJECT CODE 02-APIOS 03-SPECIAL	SUBPROJECT CODE 01-MOE 03-AES	SAMPLER EFFICI- ENCY (%)	COMMENTS FIELD OFFICE
DEC 13,88	DEC 13,88	930 815	**** ****	2	0.2	2	59646	2	1	****	E NZ
DEC 14,88	DEC 13,88	815 830	**** ****	2	1.6	2	59648	2	1	29	N
DEC 18,88	DEC 14,88	830 830	**** ****	2	0.6	2	59649	2	1	67	Z
DEC 19,88	DEC 18,88	830 835	**** ****	2	0.6	2	59651	2	1	51	
DEC 21,88	DEC 19,88	830 815	**** ****	1	0.4	2	59669	2	1	167	NZ
DEC 23,88	DEC 21,88	815 800	600 800	3	7.4	2	59672	2	1	119	HMZ
DEC 26,88	DEC 23,88	800 815	**** ****	3	22.9	2	59673	2	1	U 78	G Z
DEC 30,88	DEC 28,88	830 830	**** ****	1	4.0	2	59693	2	1	94	Z

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : PENN. STATE/DAILY/AEROCHEM

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REMOVAL DATE	EXPOSURE DATE	VOLUME ML	CONDUCT. UMHO/CM	PH FIELD	PH LAB	TOTAL H+ TO PH8.3 MG/L	TOTAL H+ GRAN MG/L	SULPHATE MG/L	NITRATE AS N MG/L
DEC 13,88	DEC 13,88	*****	!IS *****	*****	4.32	*****	0.0612	!IS *****	!IS *****
DEC 14,88	DEC 13,88	30.0	!IS *****	*****	UG 5.57	*****	LG 0.0129	!IS *****	!IS *****
DEC 18,88	DEC 14,88	26.0	!IS *****	*****	4.09	*****	0.1150	!IS *****	!IS *****
DEC 19,88	DEC 18,88	20.0	!IS *****	*****	4.11	*****	0.1020	!IS *****	!IS *****
DEC 21,88	DEC 19,88	43.0	!IS *****	*****	3.71	*****	UG 0.2430	!IS *****	!IS *****
DEC 23,88	DEC 21,88	565.0	19.5	*****	4.23	*****	0.0787	1.55	0.09
DEC 26,88	DEC 23,88	1156.0	18.5	*****	!SM *****	*****	!SM *****	1.30	<T 0.04
DEC 30,88	DEC 28,88	243.0	33.5	*****	4.16	*****	0.0862	2.65	0.40

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : PENN. STATE/DAILY/AEROCHEM

PAGE : 9

REMOVAL DATE	EXPOSURE DATE	CALCIUM MG/L	CHLORIDE MG/L	MAGNESIM MG/L	POTASSIM MG/L	SODIUM MG/L	AMMONIUM AS N MG/L	FREE H+ LAB MG/L
DEC 13,88	DEC 13,88	0.18	!IS *****	0.025	<T 0.020	0.055	0.040	0.0479
DEC 14,88	DEC 13,88	!SM *****	!IS *****	!SM *****	!SM *****	!SM *****	<T 0.020	UQ 0.0027
DEC 18,88	DEC 14,88	0.60	!IS *****	0.105	0.050	0.210	0.156	0.0813
DEC 19,88	DEC 18,88	!IS *****	!IS *****	!IS *****	!IS *****	!IS *****	0.056	0.0776
DEC 21,88	DEC 19,88	0.76	!IS *****	0.160	0.065	0.575	0.650	0.1950
DEC 23,88	DEC 21,88	<T 0.04	0.16	<T 0.010	<T 0.010	0.040	0.236	0.0589
DEC 26,88	DEC 23,88	<T 0.04	<W 0.01	<T 0.005	<T 0.025	0.030	0.116	!SM *****
DEC 30,88	DEC 28,88	0.12	0.68	0.055	0.060	0.420	0.186	0.0692

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : SUTTON/DAILY/AEROCHEM./7011

PAGE : 1

REMOVAL DATE	EXPOSURE DATE	SAMPLING START/END HR. HR.	PRECIP START/END HR. HR.	SAMPLE TYPE 01-RAIN 02-SNOW 03-COMP/04-OTHER	GAUGE DEPTH(MM)	GAUGE TYPE 01-STD. 02-NIPHER	SAMPLE NUMBER	PROJECT CODE 02-APIOS 03-SPECIAL	SUBPROJECT CODE 01-MOE 03-AES	SAMPLER EFFICI- ENCY (%)	COMMENTS FIELD OFFICE
JAN 1,88	DEC 31,87	830 830	1835 830	3	0.4	2	75289	2	1	****	E N
JAN 2,88	JAN 1,88	835 845	835 1530	2	0.8	2	75290	2	1	17	N
JAN 3,88	JAN 2,88	850 845	200 600	2	0.7	2	75291	2	1	69	
JAN 5,88	JAN 3,88	850 845	830 1530	2	4.0	2	75292	2	1	52	Y2
JAN 6,88	JAN 5,88	850 845	1200 1615	2	1.3	2	75293	2	1	8	N
JAN 7,88	JAN 6,88	850 845	****	2	0.4	2	75294	2	1	****	E N
JAN 9,88	JAN 8,88	845 820	1835 400	2	3.6	2	75295	2	1	61	
JAN 10,88	JAN 9,88	825 830	825 1630	2	0.1	2	75296	2	1	****	E N
JAN 14,88	JAN 13,88	830 830	1135 1515	2	0.9	2	75297	2	1	22	N
JAN 16,88	JAN 15,88	830 825	2130 2300	2	0.2	2	75298	2	1	****	E N
JAN 18,88	JAN 17,88	830 830	200 815	1	1.4	1	75299	2	1	135	N
JAN 19,88	JAN 18,88	840 855	1425 600	3	8.5	2	75300	2	1	73	
JAN 21,88	JAN 20,88	830 825	2350 400	3	2.3	2	75301	2	1	115	C
JAN 22,88	JAN 21,88	840 835	920 1525	3	0.2	2	75302	2	1	****	E N
JAN 25,88	JAN 24,88	830 850	1130 1915	2	1.7	2	75303	2	1	40	N
JAN 26,88	JAN 25,88	855 840	2030 840	2	12.2	2	75304	2	1	79	
JAN 27,88	JAN 26,88	850 900	850 1930	2	1.6	2	75306	2	1	27	N
JAN 29,88	JAN 27,88	905 845	1830 500	2	0.3	2	75307	2	1	****	E NY2
JAN 30,88	JAN 29,88	850 835	400 600	2	0.2	2	75308	2	1	****	E N
JAN 31,88	JAN 30,88	840 835	2000 200	1	0.4	1	75309	2	1	105	
FEB 1,88	JAN 31,88	845 825	2235 2240	1	0.1	1	75310	2	1	****	E N
FEB 2,88	FEB 1,88	830 825	1825 825	3	15.8	2	75311	2	1	87	
FEB 3,88	FEB 2,88	830 840	830 1100	2	0.9	2	75313	2	1	32	N
FEB 4,88	FEB 3,88	845 825	200 825	2	8.2	2	75314	2	1	30	N
FEB 5,88	FEB 4,88	835 900	835 1530	2	4.2	2	75315	2	1	53	
FEB 7,88	FEB 6,88	830 830	2100 200	2	0.6	2	75316	2	1	****	E N
FEB 8,88	FEB 7,88	840 825	715 825	2	1.6	2	75317	2	1	7	XN
FEB 9,88	FEB 8,88	830 825	830 840	2	0.1	2	75318	2	1	****	E N
FEB 10,88	FEB 9,88	830 840	2215 840	2	2.8	2	75319	2	1	29	N
FEB 11,88	FEB 10,88	845 830	845 1330	2	0.1	*	75320	2	1	****	E N
FEB 12,88	FEB 11,88	835 820	525 820	2	0.5	2	75321	2	1	****	E N
FEB 13,88	FEB 12,88	825 840	2100 840	2	15.6	2	75322	2	1	68	
FEB 14,88	FEB 13,88	845 825	845 2100	2	12.0	2	75323	2	1	18	N
FEB 15,88	FEB 14,88	830 830	655 705	2	0.1	2	75324	2	1	****	E N
FEB 16,88	FEB 15,88	840 830	1010 1400	3	4.2	2	75325	2	1	24	N
FEB 17,88	FEB 16,88	840 800	840 1700	2	0.9	2	75326	2	1	****	E N
FEB 18,88	FEB 17,88	805 840	805 1230	2	0.8	2	75327	2	1	31	XN
FEB 19,88	FEB 18,88	845 830	845 1000	2	0.1	2	75328	2	1	****	E N
FEB 20,88	FEB 19,88	835 820	200 530	3	4.8	2	75329	2	1	62	
FEB 21,88	FEB 20,88	825 850	1825 745	3	0.2	2	75330	2	1	****	E N

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REMOVAL DATE	EXPOSURE DATE	VOLUME ML	CONDUCT. UMHO/CM	PH FIELD	PH LAB	TOTAL H+ TO PH8.3 MG/L	TOTAL H+ GRAN MG/L	SULPHATE MG/L	NITRATE AS N MG/L
JAN 1,88	DEC 31,87	*****	*****	*****	*****	*****	*****	*****	*****
JAN 2,88	JAN 1,88	9.0	24.0	*****	4.50	*****	0.0551	2.50	0.58
JAN 3,88	JAN 2,88	31.0	40.0	*****	4.12	*****	0.1030	0.40	1.45
JAN 5,88	JAN 3,88	134.0	?IS *****	*****	?IS *****	*****	?IS *****	?IS *****	?IS *****
JAN 6,88	JAN 5,88	7.0	7.5	*****	UG 7.21	*****	?IS *****	?IS *****	?IS *****
JAN 7,88	JAN 6,88	*****	*****	*****	*****	*****	*****	LQ 0.20	<T 0.04
JAN 9,88	JAN 8,88	142.0	7.0	*****	?IS *****	*****	?IS *****	*****	*****
JAN 10,88	JAN 9,88	*****	*****	*****	*****	*****	?IS *****	0.70	0.44
JAN 14,88	JAN 13,88	13.0	6.0	*****	?IS *****	*****	?IS *****	*****	*****
JAN 16,88	JAN 15,88	*****	*****	*****	*****	*****	?IS *****	1.05	0.29
JAN 18,88	JAN 17,88	122.0	?IS *****	*****	?IS *****	*****	*****	*****	*****
JAN 19,88	JAN 18,88	402.0	23.5	*****	*****	*****	?IS *****	?IS *****	?IS *****
JAN 21,88	JAN 20,88	171.0	46.0	*****	4.26	*****	0.0812	1.80	0.49
JAN 22,88	JAN 21,88	*****	*****	*****	4.02	*****	0.1340	3.95	0.96
JAN 25,88	JAN 24,88	44.0	33.0	*****	*****	*****	*****	*****	*****
JAN 26,88	JAN 25,88	621.0	5.0	*****	?IS *****	*****	?IS *****	1.15	0.96
JAN 27,88	JAN 26,88	28.0	3.0	*****	?IS *****	*****	?IS *****	0.40	0.17
JAN 29,88	JAN 27,88	*****	*****	*****	?IS *****	*****	?IS *****	0.60	0.11
JAN 30,88	JAN 29,88	*****	*****	*****	*****	*****	*****	*****	*****
JAN 31,88	JAN 30,88	27.0	> 100.0	*****	LG 3.60	*****	*****	*****	*****
FEB 1,88	JAN 31,88	*****	*****	*****	*****	*****	UG 0.3070	UG 8.90	3.10
FEB 2,88	FEB 1,88	890.0	30.0	*****	4.24	*****	*****	*****	*****
FEB 3,88	FEB 2,88	19.0	3.5	*****	UG 6.23	*****	0.0827	2.20	0.54
FEB 4,88	FEB 3,88	162.0	14.0	*****	4.58	*****	0.0167	<T 0.10	<T 0.02
FEB 5,88	FEB 4,88	143.0	16.0	*****	4.51	*****	0.0446	<T 0.15	0.43
FEB 7,88	FEB 6,88	*****	*****	*****	*****	*****	0.0492	0.45	0.40
FEB 8,88	FEB 7,88	8.0	*****	*****	*****	*****	*****	*****	*****
FEB 9,88	FEB 8,88	*****	*****	*****	*****	*****	*****	*****	*****
FEB 10,88	FEB 9,88	53.0	91.0	*****	*****	*****	*****	*****	*****
FEB 11,88	FEB 10,88	*****	*****	*****	3.75	*****	0.2080	2.90	2.75
FEB 12,88	FEB 11,88	*****	*****	*****	*****	*****	*****	*****	*****
- FEB 13,88	FEB 12,88	680.0	5.5	*****	<=> 5.00	*****	*****	*****	*****
FEB 14,88	FEB 13,88	139.0	10.5	*****	4.79	*****	0.0242	<T 0.25	0.11
FEB 15,88	FEB 14,88	*****	*****	*****	*****	*****	0.0347	0.40	0.30
FEB 16,88	FEB 15,88	67.0	28.0	*****	4.26	*****	*****	*****	*****
FEB 17,88	FEB 16,88	*****	*****	*****	*****	*****	0.0773	2.10	0.39
FEB 18,88	FEB 17,88	16.0	*****	*****	*****	*****	*****	*****	*****
FEB 19,88	FEB 18,88	*****	*****	*****	*****	*****	*****	*****	*****
- FEB 20,88	FEB 19,88	191.0	11.5	*****	4.68	*****	*****	*****	*****
- FEB 21,88	FEB 20,88	*****	*****	*****	*****	*****	0.0388	1.05	0.07

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ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : SUTTON/DAILY/AEROCHEM./7011

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REMOVAL DATE	EXPOSURE DATE	SAMPLING START/END HR. HR.	PRECIP START/END HR. HR.	SAMPLE TYPE 01-RAIN 02-SNOW 03-COMP/04-OTHER	GAUGE DEPTH(MM)	GAUGE TYPE 01-STD. 02-NIPHER	SAMPLE NUMBER	PROJECT CODE 02-APIOS 03-SPECIAL	SUBPROJECT CODE 01-MOE 03-AES	SAMPLER EFFICI- ENCY (%)	COMMENTS FIELD OFFICE
FEB 23,88	FEB 22,88	820 820	645 820	3	0.8	2	75331	2	1	54	
FEB 24,88	FEB 23,88	825 820	825 1630	3	7.3	2	75333	2	1	90	
FEB 25,88	FEB 24,88	830 815	2300 500	2	1.2	2	75334	2	1	45	C N
FEB 26,88	FEB 25,88	820 835	1230 1515	2	0.3	2	75335	2	1	****	E N
MAR 1,88	FEB 29,88	830 850	1915 2030	2	2.0	2	75336	2	1	39	N
MAR 3,88	MAR 2,88	820 820	2040 500	2	3.2	2	75337	2	1	81	
MAR 4,88	MAR 3,88	825 830	825 1130	2	0.1	2	75338	2	1	****	E N
MAR 5,88	MAR 4,88	835 825	835 1130	2	0.1	2	75339	2	1	****	E N
MAR 8,88	MAR 7,88	825 825	1045 1245	2	0.7	2	75340	2	1	55	E
MAR 10,88	MAR 9,88	830 810	1235 2300	1	16.0	2	75341	2	1	104	
MAR 13,88	MAR 10,88	815 815	300 815	3	2.9	2	75343	2	1	93	Y3
MAR 14,88	MAR 13,88	820 815	820 1545	3	2.4	2	75344	2	1	102	C
MAR 15,88	MAR 14,88	820 825	820 1750	2	2.8	2	75345	2	1	33	N
MAR 16,88	MAR 15,88	830 820	1900 800	2	6.2	2	75346	2	1	67	C
MAR 19,88	MAR 18,88	830 825	200 700	2	0.1	2	75347	2	1	****	E N
MAR 20,88	MAR 19,88	835 830	400 830	2	1.4	2	75348	2	1	56	C
MAR 21,88	MAR 20,88	835 830	835 1300	2	0.5	2	75349	2	1	****	E N
MAR 24,88	MAR 23,88	830 825	300 600	1	0.1	1	75351	2	1	****	E N
MAR 25,88	MAR 24,88	830 810	745 810	1	0.2	1	75352	2	1	****	E N
MAR 26,88	MAR 25,88	815 840	300 840	1	15.0	1	75353	2	1	101	
MAR 27,88	MAR 26,88	850 840	400 840	1	8.2	1	75354	2	1	95	
MAR 28,88	MAR 27,88	845 825	845 1530	3	7.0	2	75355	2	1	90	
MAR 29,88	MAR 28,88	830 800	830 930	2	0.1	2	75356	2	1	****	E N
APR 2,88	APR 1,88	815 830	1805 1920	1	0.1	1	75357	2	1	****	E N
APR 3,88	APR 2,88	835 805	620 640	1	0.1	1	75358	2	1	****	E N
APR 4,88	APR 3,88	810 830	130 500	1	5.0	1	75359	2	1	101	X
APR 5,88	APR 4,88	835 845	835 1515	1	6.3	1	75360	2	1	97	
APR 9,88	APR 8,88	815 820	1200 1230	1	0.1	1	75361	2	1	****	E N
APR 11,88	APR 10,88	845 800	400 615	1	0.4	1	75362	2	1	****	E N
APR 15,88	APR 11,88	805 820	2230 100	1	1.0	1	75363	2	1	90	Y4
APR 16,88	APR 15,88	825 840	825 1710	3	10.8	2	75364	2	1	96	M
APR 17,88	APR 16,88	845 845	2000 500	2	20.2	2	75365	2	1	86	
APR 18,88	APR 17,88	850 820	300 745	1	2.4	1	75366	2	1	96	
APR 19,88	APR 18,88	825 820	825 1030	1	4.2	1	75367	2	1	82	
APR 20,88	APR 19,88	825 830	300 825	2	0.4	2	75369	2	1	****	E N
APR 21,88	APR 20,88	835 830	900 1500	2	0.2	2	75370	2	1	****	E N
APR 23,88	APR 22,88	845 850	845 1430	3	5.0	2	75372	2	1	111	HCM
APR 24,88	APR 23,88	855 835	1710 835	1	9.8	1	75373	2	1	103	
APR 25,88	APR 24,88	840 810	840 600	1	7.6	1	75374	2	1	80	C
APR 26,88	APR 25,88	815 750	1400 1615	1	2.2	1	75375	2	1	83	

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : SUTTON/DAILY/AEROCHEM./7011

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REMOVAL DATE	EXPOSURE DATE	VOLUME ML	CONDUCT. UMHO/CM	PH FIELD	PH LAB	TOTAL H+ TO PH8.3 MG/L	TOTAL H+ GRAN MG/L	SULPHATE MG/L	NITRATE AS N MG/L
FEB 23,88	FEB 22,88	28.0	22.5	*****	4.46	*****	0.0576	1.90	0.63
FEB 24,88	FEB 23,88	422.0	23.5	*****	4.46	*****	0.0603	1.55	0.58
FEB 25,88	FEB 24,88	35.0	50.5	*****	4.17	*****	0.1070	2.05	1.76
FEB 26,88	FEB 25,88	*****	*****	*****	*****	*****	*****	*****	*****
MAR 1,88	FEB 29,88	51.0	37.5	*****	4.41	*****	0.0711	3.70	1.09
MAR 3,88	MAR 2,88	167.0	73.0	*****	4.04	*****	0.1450	3.80	2.15
MAR 4,88	MAR 3,88	*****	*****	*****	*****	*****	*****	*****	*****
MAR 5,88	MAR 4,88	*****	*****	*****	*****	*****	*****	*****	*****
MAR 8,88	MAR 7,88	25.0	*****	*****	*****	*****	*****	*****	*****
MAR 10,88	MAR 9,88	1069.0	46.0	*****	4.11	*****	0.1200	3.65	0.66
MAR 13,88	MAR 10,88	174.0	41.0	*****	4.12	*****	0.1010	1.35	1.35
MAR 14,88	MAR 13,88	157.0	46.5	*****	4.05	*****	0.1170	2.45	1.10
MAR 15,88	MAR 14,88	60.0	44.5	*****	4.08	*****	0.1100	1.85	1.22
MAR 16,88	MAR 15,88	269.0	18.5	*****	4.55	*****	0.0503	1.15	0.46
MAR 19,88	MAR 18,88	*****	*****	*****	*****	*****	*****	*****	*****
MAR 20,88	MAR 19,88	51.0	21.5	*****	4.46	*****	0.0547	0.75	0.68
MAR 21,88	MAR 20,88	*****	*****	*****	*****	*****	*****	*****	*****
MAR 24,88	MAR 23,88	*****	*****	*****	*****	*****	*****	*****	*****
MAR 25,88	MAR 24,88	*****	*****	*****	*****	*****	*****	*****	*****
MAR 26,88	MAR 25,88	978.0	12.5	*****	4.66	*****	0.0387	1.10	0.24
MAR 27,88	MAR 26,88	501.0	14.0	*****	4.55	*****	0.0436	1.05	0.25
MAR 28,88	MAR 27,88	407.0	20.5	*****	4.43	*****	0.0574	2.10	0.34
MAR 29,88	MAR 28,88	*****	*****	*****	*****	*****	*****	*****	*****
APR 2,88	APR 1,88	*****	*****	*****	*****	*****	*****	*****	*****
APR 3,88	APR 2,88	*****	*****	*****	*****	*****	*****	*****	*****
APR 4,88	APR 3,88	324.0	*****	*****	*****	*****	*****	*****	*****
APR 5,88	APR 4,88	394.0	! IS *****	*****	4.34	*****	0.0824	! IS *****	! IS *****
APR 9,88	APR 8,88	*****	*****	*****	*****	*****	*****	*****	*****
APR 11,88	APR 10,88	*****	*****	*****	*****	*****	*****	*****	*****
APR 15,88	APR 11,88	58.0	! IS *****	*****	3.70	*****	UG 0.3140	! IS *****	! IS *****
APR 16,88	APR 15,88	666.0	42.0	*****	4.19	*****	0.1090	2.30	1.01
APR 17,88	APR 16,88	1114.0	15.0	*****	4.64	*****	0.0498	1.35	0.32
APR 18,88	APR 17,88	148.0	68.0	*****	4.28	*****	0.1120	UG 9.10	2.14
APR 19,88	APR 18,88	221.0	36.0	*****	4.43	*****	0.0752	4.80	0.61
APR 20,88	APR 19,88	*****	*****	*****	*****	*****	*****	*****	*****
APR 21,88	APR 20,88	*****	*****	*****	*****	*****	*****	*****	*****
APR 23,88	APR 22,88	357.0	7.0	*****	UG 6.05	*****	0.0189	1.15	0.15
APR 24,88	APR 23,88	652.0	25.5	*****	4.29	*****	0.0746	2.45	0.55
APR 25,88	APR 24,88	393.0	29.0	*****	4.20	*****	0.0862	2.35	0.48
APR 26,88	APR 25,88	118.0	11.5	*****	UG 6.87	*****	0.0166	1.80	0.23

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : SUTTON/DAILY/AEROCHEM./7011

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REMOVAL DATE	EXPOSURE DATE	CALCIUM MG/L	CHLORIDE MG/L	MAGNESIUM MG/L	POTASSIUM MG/L	SODIUM MG/L	AMMONIUM AS N MG/L	FREE H+ LAB MG/L
FEB 23,88	FEB 22,88	0.56	0.18	0.065	<T 0.020	0.100	0.330	0.0347
FEB 24,88	FEB 23,88	0.28	0.16	0.035	<T 0.015	0.200	0.220	0.0347
FEB 25,88	FEB 24,88	!IS *****	0.72	!IS *****	!IS *****	!IS *****	0.130	0.0676
FEB 26,88	FEB 25,88	*****	*****	*****	*****	*****	*****	*****
MAR 1,88	FEB 29,88	!IS *****	0.30	!IS *****	!IS *****	!IS *****	!IS *****	0.0389
MAR 3,88	MAR 2,88	1.10	0.76	0.120	0.055	0.370	1.190	0.0912
MAR 4,88	MAR 3,88	*****	*****	*****	*****	*****	*****	*****
MAR 5,88	MAR 4,88	*****	*****	*****	*****	*****	*****	*****
MAR 8,88	MAR 7,88	*****	*****	*****	*****	*****	*****	*****
MAR 10,88	MAR 9,88	0.12	0.09	<T 0.010	<T 0.010	0.045	0.320	0.0776
MAR 13,88	MAR 10,88	0.50	0.16	0.050	<T 0.010	0.060	0.200	0.0759
MAR 14,88	MAR 13,88	0.12	0.13	<T 0.005	<T 0.005	0.035	0.410	0.0891
MAR 15,88	MAR 14,88	!IS *****	0.16	!IS *****	!IS *****	!IS *****	!IS *****	0.0832
MAR 16,88	MAR 15,88	0.12	0.10	<W 0.005	<T 0.010	0.045	0.270	0.0282
MAR 19,88	MAR 18,88	*****	*****	*****	*****	*****	*****	*****
MAR 20,88	MAR 19,88	!IS *****	0.20	!IS *****	!IS *****	!IS *****	LG 0.005	0.0347
MAR 21,88	MAR 20,88	*****	*****	*****	*****	*****	*****	*****
MAR 24,88	MAR 23,88	*****	*****	*****	*****	*****	*****	*****
MAR 25,88	MAR 24,88	*****	*****	*****	*****	*****	*****	*****
MAR 26,88	MAR 25,88	<T 0.04	0.15	<T 0.010	<T 0.015	0.125	0.120	0.0219
MAR 27,88	MAR 26,88	<W 0.02	<T 0.03	<W 0.005	<T 0.010	<T 0.025	0.090	0.0282
MAR 28,88	MAR 27,88	<W 0.02	<T 0.02	<W 0.005	<T 0.010	<T 0.025	0.330	0.0372
MAR 29,88	MAR 28,88	*****	*****	*****	*****	*****	*****	*****
APR 2,88	APR 1,88	*****	*****	*****	*****	*****	*****	*****
APR 3,88	APR 2,88	*****	*****	*****	*****	*****	*****	*****
APR 4,88	APR 3,88	*****	*****	*****	*****	*****	*****	*****
APR 5,88	APR 4,88	!IS *****	!IS *****	!IS *****	!IS *****	!IS *****	!IS *****	0.0457
APR 9,88	APR 8,88	*****	*****	*****	*****	*****	*****	*****
APR 11,88	APR 10,88	*****	*****	*****	*****	*****	*****	*****
APR 15,88	APR 11,88	!IS *****	!IS *****	!IS *****	!IS *****	!IS *****	!IS *****	0.1995
APR 16,88	APR 15,88	<T 0.02	0.24	<T 0.010	<T 0.015	0.070	0.380	0.0646
APR 17,88	APR 16,88	<W 0.02	<T 0.03	<W 0.005	<W 0.005	<T 0.025	0.330	0.0229
APR 18,88	APR 17,88	1.90	0.30	0.365	0.075	0.055	2.000	0.0525
APR 19,88	APR 18,88	0.32	0.06	0.045	0.030	<T 0.025	1.080	0.0372
APR 20,88	APR 19,88	*****	*****	*****	*****	*****	*****	*****
APR 21,88	APR 20,88	*****	*****	*****	*****	*****	*****	*****
APR 23,88	APR 22,88	0.12	<T 0.02	<T 0.010	<T 0.005	<T 0.020	0.310	UG 0.0009
APR 24,88	APR 23,88	0.18	0.05	<T 0.020	<T 0.010	<T 0.010	0.400	0.0513
APR 25,88	APR 24,88	<T 0.02	<T 0.03	<W 0.005	<T 0.010	<W 0.005	0.260	0.0631
APR 26,88	APR 25,88	0.78	0.09	0.055	<T 0.025	0.080	0.380	UG 0.0001

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